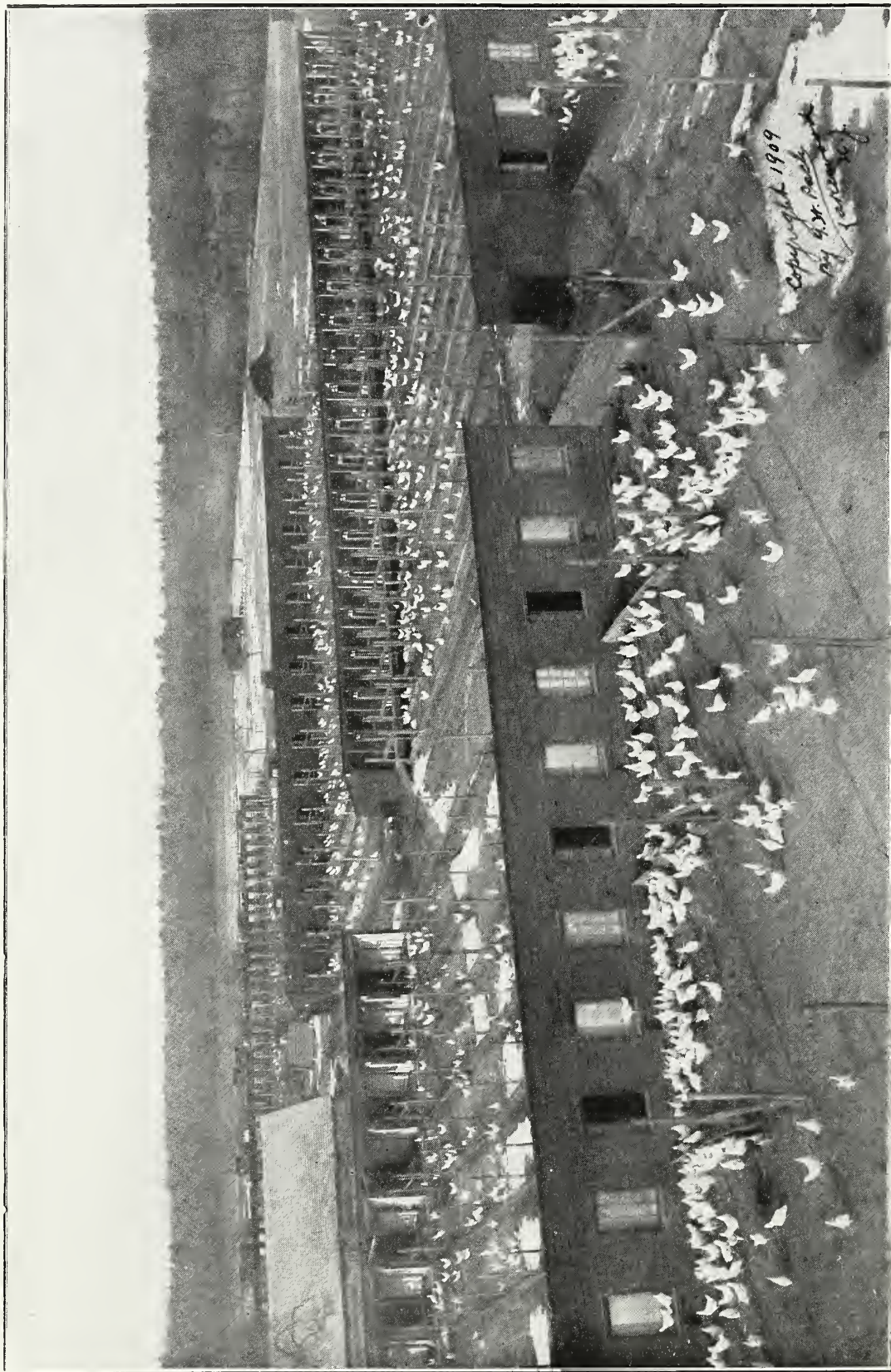


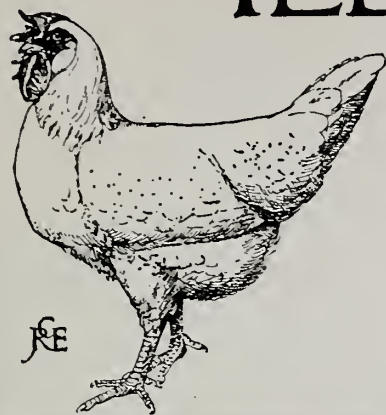
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A BIRD'S-EYE VIEW OF AN AMERICAN EGG-FARM.

# THE ILLUSTRATED POULTRY RECORD



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## DIARY OF THE MONTH.

### EDITORIAL NOTICES.

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### The Dairy Show.

There is no doubt about the importance of the Dairy Show, whatever may be the case with other big chicken fixtures of the year. In Fancy circles it is looked forward to as an event at which the very choicest of the season's chickens will be staged, and to win at the Exhibition is to score one of the most coveted honours of the year. The great difference between the early shows and the Dairy is that to be successful at the former the fancier has to hatch his fowls out of season, since to win early in the year the chickens must at least show forward growth. Not so the Dairy, however, and fowls hatched in March have often carried off premier awards, and at last month's show there were several instances of this. Many of the fowls were affected by the unusually warm weather, which, combined with their long confinement in the galleries, where the heat was almost unbearable at night, caused them to go into a partial moult. But those fanciers who exhibit at the Dairy are aware of the conditions under which the birds are staged, hence there is no room for complaint. From all points of view the 1910 Show was a decided success, and not only was it interesting to the fancier but the purely utility poultry-keeper found in it much that was pleasing and instructive, since there was on view a very large collection of houses, incubators, rearers, and other appliances.

### The Rush of Club Meetings.

On the Tuesday and Wednesday of the Dairy Show, Specialist Club meetings were being held in every corner of the hall, and we heard more than one prominent fancier complain that there were far too many of

them. There can be no doubt that the Dairy is the best show of the year for getting a good attendance of members, while the private rooms and trade stalls provide meeting-places such as would be difficult to find at any other show. Yet there is sound sense in the suggestion that, in order to relieve the pressure at the Dairy, as many meetings as possible should be held in connection with the Club Shows. On the Wednesday afternoon, in particular, meetings were very numerous, and fanciers rushed from one to another, while in at least one case the secretary of one club looked in at another club's meeting in order to carry off those of his own members who were present. One of the harassed secretaries told us that in spite of its advantages the Dairy was a very difficult place to get a meeting together, owing to the numerous attractions of a like kind. There is, he assured us, invariably more time for such gatherings at Club Shows, but in this own case he had latterly found it necessary to hold meetings at both events, and sometimes at the Crystal Palace as well. Might we suggest that in future the pressure might be eased at the Dairy if a few meetings were held on the mornings of the second and third days? The trouble arises through so many clubs choosing the convenient hours of 3 p.m. to 4 p.m.

### Fancy Classes at the Royal Show.

Apropos Mr. Broomhead's interesting announcement in "Fanciers and Fancy Matters" regarding next year's Royal Show, it may not be generally known that Fancy breeds were not included in the schedule of this show until 1885. As a matter of fact, it was the opinion of most authorities at that time that it was impossible to combine Utility and Fancy points—poultry bred for exhibition purposes were useless as layers or as table fowls! We believe poultry were catered for at the "Royal" almost from its inception, and as far back as 1854, when the event was held at Lincoln, a report on the show reads as follows: "The display of poultry, though good, was not as large as it might have been, the Society not encouraging the display of Fancy birds, the show being intended for the promotion of breeding poultry as a practical business of farming, and not to encourage Fancy breeds, which, while they obtain a high nominal value, are of no use in the farmyard." It is interesting to note that in 1854 the poultry classes given were Brahmas, one; Cochins, two; Dorkings, three; Game, two; Hamburgs, four; Malay and Polands, one each; Spanish, two; Ducks, three; and Geese and Turkeys, one each. There were about three hundred

entries at the event, which was by no means bad for a summer show of twenty-one classes; and the prizes were liberal, ranging from £5 downwards—Cochins, Dorkings, Game, and Spanish being the most liberally catered for in the amount of prize-money.

### International Show at Turin.

Information has reached us that in connection with the International Exhibition, to be held at Turin next year, a great live-stock show is to take place on May 5, 6, and 7, in which poultry will occupy an important place. A strong desire has been expressed on the part of the Italian authorities that British poultry shall be adequately represented. That it is to the advantage of our breeders that such should be the case is unquestionable, and we hope they will respond in a manner worthy of the occasion. The Agricultural Committee of the Royal Commission on Foreign Exhibitions has this question under consideration. That body can only act, however, if supported by breeders, who have an opportunity of placing their foreign trade on a wider and surer basis than has hitherto been possible. We learn that the enlarged photographs of live-stock displayed at Brussels and Buenos Aires this year will be exhibited at Turin during the entire Exhibition, and cannot fail to be a great advertisement; but to show the live specimens is equally necessary. It may be mentioned that at Buenos Aires so great was the demand for copies of the Spanish Edition of the "Live-Stock Handbook," issued by the Board of Agriculture, that the entire edition printed was sold out. We assume that an Italian edition will be issued in view of Turin.

### Turkey-Breeding on Open Lands.

A letter in the *Times* from the Secretary of the National Poultry Organisation Society has called special attention to the opportunities for breeding turkeys on the uncultivated areas of the country, where the conditions provide the space essential for this class of poultry, thus avoiding those risks of tainted soil which form the chief danger for farmers. It is pointed out that in Great Britain there are twenty-four million acres of uncultivated land, and if the higher mountains, water areas, and bogs are omitted, there is still a balance of several million acres, much of which is suitable for turkeys. "The wolds and moors of Yorkshire and the medium elevations of Wales could maintain profitably more turkeys than now exist in the whole of Britain. No other stock need be interfered with." If that is correct, and it certainly demands inquiry, the opportunities for

increased production would appear to be great. The letter further states:

Under these circumstances, I submit that owners of open lands and hill farmers in many parts of the country might find a new and profitable industry in turkey-breeding. Such lands are cheap, they are not very productive, the turkeys would be able to find a considerable part of their food, and would help improve the soil by manurial influences. There would be fewer risks of losses by foxes and other enemies than in other parts of the country.

Increased production is becoming of greater importance than ever before, and we commend this suggestion to those living within the areas referred to.

### Irish Poultry Statistics.

Returns issued by the Irish Department of Agriculture indicate a satisfactory increase in the number of poultry kept, amounting to a total of 234,081, with the usual variations, for whilst turkeys and fowls have advanced largely, geese and ducks show a decline. Geese scarcely surprise us, as such a tendency is general and is due to economic changes, but why there should be a falling-off of nearly 100,000 ducks is not easily understood. The Trade Returns for 1909 are excellent so far as the poultry industry is concerned, indicating an increase all round in the values of exports, although there is a slight reduction in the number of eggs shipped to Britain, but with the increase of the national stock of fowls no doubt this will be remedied. The total exports of poultry products are as follow: Eggs, £2,863,221; poultry, £857,276; feathers, £32,968; a total of £3,753,465. As the total imports of eggs and poultry only amounted to £49,208, the net exports amounted to £3,704,257, which, however, do not include the Parcel Post trade, which would probably add nearly £40,000 to the above total. As the returns state:

The Irish export of eggs was second largest (to Great Britain) in total quantities and value, amounting to 6,362,714 gt. hds., valued at £2,863,221, the imports into the United Kingdom from Russia being the largest, amounting to 8,154,635 gt. hds., valued at £2,929,487.

The export of poultry from Ireland was much greater than that from any other country into the United Kingdom, Ireland exporting to Great Britain poultry to the value of £857,276, while the highest imports from other countries to the United Kingdom were: From Russia, £351,918; France, £156,085; and United States, £149,552.

As the net exports of dairy products (butter and margarine) were in value £3,282,012, poultry stand second in the trade done, exceeding the last-named by £422,245.

### After-Effects of the Egg Train.

A correspondent who has recently had an opportunity of visiting the districts of South Wales covered by the Egg and Poultry Demonstration Train last April, informs us that the results of that expedition have been very remarkable indeed, in that a great stimulus has been given to production, and farmers are undoubtedly paying more attention to their fowls than ever before. But that is not all. Traders have evidently been led to pay more attention to that section of the country. As a consequence demand has increased and prices have been strengthened, though they are far short of what would be the case were a better system of marketing adopted. That will be accomplished in process of time as co-operative methods are introduced. Several societies will shortly be at work, and thus a new factor be brought to bear upon the problem. Whilst, therefore, the National Poultry Organisation Society and the Agricultural Organisation Society were specially concerned in promotion of combination among producers, their enterprise has already proved its value in helping forward the development of our rural districts.

### The Claims of Poultry.

Canadian exchanges record a very interesting movement for placing the poultry industry of the Dominion on a more satisfactory basis. A deputation was recently received by the Hon. Sydney Fisher, Minister of Agriculture for Canada, whose interest in poultry questions is well known, at which suggestions were made for improving this branch of agriculture. No longer a pastime, it is of national importance. The proposals made were as follows: first, that a Poultry Commissioner should be appointed for the entire country, his duties being to study the question from a national standpoint, taking up such questions as markets, standards, diseases, and kindred subjects, and that a conference of provincial poultry experts shall be held every year; second, that a department of scientific research in poultry shall be established to study diseases, &c.; third, that the promotion of standardisation of poultry products and of co-operation in marketing shall be regarded as the duty of the Department of Agriculture; fourth, that the Poultry Experiment Station at Ottawa, which is inadequate and out of date, shall be discontinued, and re-organised with provincial plants on a wider basis; and, fifth, that Mr. A. G. Gilbert, whose work has been so valuable, shall be made Chief Poultry Lecturer for Canada. The response met with, although necessarily restrained by official reserve, was most encouraging, and we

hope that Canadian poultrymen will accomplish their purpose at an early date. In view of the remarkable developments in the States, they are more than justified in making an effort to place their industry on a broader and surer foundation.

### Judges and Type.

There can be no doubt that type counts for comparatively little with many of our English judges, and there appears to be a growing tendency to push it further into the background. We note that a well known and popular judge of Wyandottes, in giving his reasons for placing a bad-shaped Black Wyandotte at the head of a class, recently declared that "type is easy enough to get in Black Wyandottes," and on that account he and others argue that it should not be placed before other and more difficult points. On the other hand, it may be argued that if type is so easy to get it should necessarily be regarded as a *sine qua non*, instead of, as some judges appear to suggest, merely optional. In the sister variety, the White Wyandotte, type is more highly valued, and that may be because other points are not so elusive; yet we doubt very much whether the purest-coloured bird would pass muster with the popular judge referred to above if it had a Plymouth Rock body. The Americans regard type as a characteristic of the breed, and would consider a Rock body on a Wyandotte just as objectionable as a single comb. Slight deviations must be tolerated, of course, but surely it is time fanciers made up their minds to regard the general characteristics of a variety with a little more respect. It is refreshing to find mention in the schedule of the Partridge Wyandotte Club Show of a valuable special for the best shaped bird, an example that might produce excellent results if more generally adopted.

### Progeny Tests.

This is the latest addition to poultry phraseology, and it will serve its turn much more appropriately than some of the peculiarities of diction that have passed muster in the literature and language of the subject. The proposed progeny tests, of which Mr. J. N. Leigh is the proposer, are to be critical examinations of the descendants of fowls of proved prolificness; and if it is found possible to materialise the suggestion, the educational value of laying competitions should be considerably advanced. The competitions have, in fact, reached a point from which it is advisable that they should progress. There is only one obvious direction in which to advance, and it has been indicated under the very suggestive title of progeny tests, of which perhaps not one

nor two will suffice as the basis of very sound argument; but it is fairly evident that laying competitions must eventually stand or fall, as regards their permanent utility, by the results of subsequent progeny tests. The proposal is, moreover, opportune, being put forward at a time when the usefulness of laying tests has been called in question, the questions emanating from several directions; and although not all the questioners can claim equal authority for their utterances, the fact that the volume of their sound is heard by the great ear of the public must not be entirely ignored. As a matter of fact some such tests of the fertility and rearing percentages of the eggs produced by prolific strains, and the subsequent character of the progeny of record layers, must at some time be made in the general interests of practical producers.

### Growing Tests.

To do one thing at a time, and do it thoroughly, is surely a counsel of perfection that should be within measurable distance of attainment, and when we consider the limited resources at the command of such a body as the Utility Poultry Club, it would appear to be wiser to concentrate than divide the possible efforts. To do well the one thing to which the Club has hitherto devoted so much attention, it has been argued that it should proceed with the supplemental investigation into the character of the descendants of the birds that compete in laying tests, and such a work may be regarded as the legitimate conclusion of that which is in hand. On the other hand there are those who rightly urge the necessity for growing tests, and in the main their arguments cannot be gainsaid. There is need for more light regarding the table-poultry-producing branch of the industry, and authoritative experiments are required to settle several debatable points; but it is neither fair nor advisable to ask the U.P.C. to contemplate the conduct of such tests at the present juncture. Some of the leading representatives of the Club are very anxious to do something in this direction, but they are not blind to the obstacles in the way. It is evident that the Club cannot do as thoroughly as is desirable with laying *plus* progeny tests without some financial assistance from a Government source, so that it would be futile at this stage to contemplate the considerable additional burden of growing tests. As a matter of fact it would be an easy matter to draw out a full scheme of poultry problems awaiting solution, and which can scarcely be adequately solved without the sufficient and constant practical aid of Government—but that is another story, concerning an institute rather than a club.

## A BACKWARD GLANCE.

### NOTES ON SOME OF THE POULTRY FATHERS.

By EDWARD BROWN, F.L.S.

THE advent of a new edition of Wright's "Book of Poultry" cannot fail to stir the pulses of those who can remember its first publication, drawing their thoughts back to days near forty years past, when the monthly issue of that great work was eagerly anticipated, equally for its text and the Ludlow plates. The march of time means that year by year the number of those who were the first readers steadily but surely decreases. There are, however, yet many able to recall 1872 who may share in these brief reminiscences. Younger poultrymen can have no conception of what the appearance of such a book meant. They have entered into the heritage of experience and of widened knowledge which, to a large extent, was denied to those who preceded them—at least, in available form. Many of these older breeders were skilful beyond our conception, such skill being bought by personal study and practical observation, and were wonderfully charged with the science of breeding, even though they were unable to express themselves in scientific terms. They had learnt in the stern school of experience, and their tendencies were less speculative than is the case to-day. But the novice had not available to the same extent as now compilations and records to which he could turn for the help needed by him. If he were able to meet at exhibitions or elsewhere one or other of the men to whom I have referred, he was, indeed, favoured, for they were ever ready to communicate their knowledge, to help the budding breeder, to guide his halting footsteps. To these men it seemed a delight to impart information of the greatest value to the young fancier, without desire for or thought of reward. But such opportunity was rare to the great majority. When, therefore, Wright's book appeared it was a veritable mine of wisdom. In saying this I do not condemn works published previously, for to these we owe more than can ever be told. Many are worth careful study even now, apart from their historical value. But poultry books soon get out of date, and the progress made in the 'fifties and 'sixties was very great. Mr. Lewis Wright brought this into one focus. With his conscientiousness of treatment, balanced judgment, and literary skill, he accomplished what had not been done by his predecessors.

Talking the other day with Mr. S. H. Lewer, to whom has been entrusted the duty of editing this latest edition, mention was made of the impression as to the extent to which other writers have been influenced by Lewis Wright. Practically speaking, he founded a school of thought in respect to poultry. I, for one, have stated before what it is a pleasure to repeat—that his influence in my earlier days was far and away beyond that of all others combined, both as to ideals and methods. His conception as an editor was very lofty, perhaps too elevated for some of those with whom he came in contact. Stern to a degree to the wrongdoer, and there were plenty such among exhibitors of those days, no matter what the position held might be, he was eminently just. Many of those who were inspired by his work and glad to follow his teaching have gone off on to other lines, due to natural evolution of the industry. He was essentially a fancier. That aspect of poultry-breeding appealed most to him, as can be seen by the earlier editions of his books. But he recognised the value of utility poultry and of the poultry industry at large, as evidenced by the inclusion of much relating thereto in later and revised issues. The success of this work led to the founding of the *Fanciers' Gazette*, afterwards enlarged into the *Live-Stock Journal*, which made its first appearance on April 11, 1874, and did for poultry journalism what the "Book of Poultry" had done for its literature.

Such observations have helped to recall other men who were prominent at the period referred to, but, be it noted, specially among breeders for exhibition, though there were many amateurs of all classes. In the North of England factory operatives and miners were ardent poultry-breeders, as many of them are to-day. I am not sure but that these may be regarded as having been the mainstay of fancy poultry-breeding.

The name of Edward Hewitt is scarcely known at all to younger poultrymen. He wrote no book, seldom contributed articles to papers, but the influence he exerted was enormous. It was my pleasure to meet him on several occasions. Although I was very young and he an older man, the charm of his manner and the earnestness of his spirit made an impression which remains. He was *facile*

*princeps* among the poultry judges, and in those days judges made and unmade breeds. It was their dictum which determined everything. His services were given without fee or reward, and there were several others who did the same, the last of whom was, I think, the late Mr. James Dixon. And so greatly were Mr. Hewitt's labours appreciated that in 1867-8 fanciers, to their credit, subscribed £500, which in various forms was presented to him at Hull in 1868. Born in 1811, when I first met him he was sixty-four years old. At the age of seven years he began as a breeder of Bantams, he was an exhibitor at the first Birmingham Show, and his first appointment as judge was in 1852. In one of the earliest issues of the *Fanciers' Gazette* (April 25, 1874) a fine tribute was paid to Mr. Hewitt, probably written by Mr. Lewis Wright: "He (Mr. Edward Hewitt) has had more to do with the settlement of what shape the various breeds were to take than probably all others put together."

It is not generally known that Mr. James Long, the eminent Dairy expert, was formerly a prominent poultry-breeder, more especially of Hamburgs, before turning his attention to the larger class of stock and their products. After throwing up the Civil Service for journalism, Mr. Long established the *Poultry Review*, but that had not a very long career, and, I believe, ceased to exist soon after the *Fanciers' Gazette* was established, but I am not quite certain about the exact date. It was a well-edited little paper, one of the pioneers in specialist poultry journals. Mr. Long first won his spurs by winning the prize for an essay on Poultry offered by the New York Poultry Association.

One of the most notable judges thirty to forty years ago was Richard Teebay, of Fulwood, Preston, whose quaint, lanky figure and pronounced Lancashire dialect could never be forgotten by anyone who had met him. His services were in demand East and West, North and South, as an all-round judge, though Brahmas were his chief favourites in later days. Born in 1813, he kept Mooneys as a boy, and exhibited Hamburg hens before the days of Poultry Shows, the competitions being for copper kettles; each bird was compared with a rival, and the last on the table regarded as the victor. Game, Spanish, Cochins, and Brahmas were bred by him in turn. A shy, reserved, somewhat ungainly man, he was full of poultry lore, and no one who sought his advice ever did so in vain. But woe to the man who tried to influence his judgment unfairly. He occupied a high place in the eyes of his fellows at Preston, and for many years held important

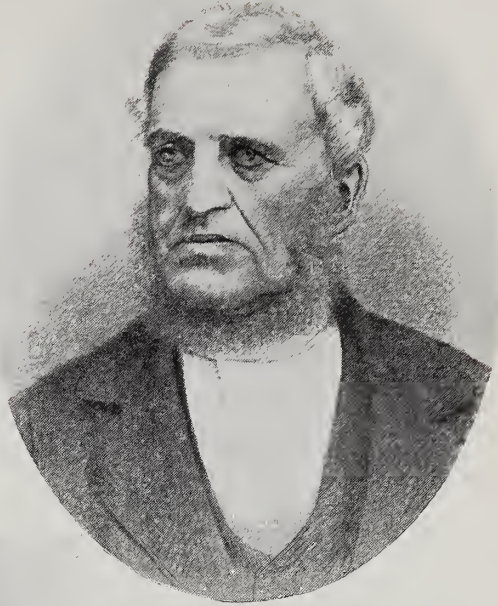
honorary public offices. Though meeting him frequently, I only once visited his place at Fulwood, where he kept a select if small stock of Brahmas. He was one of the judges of the first Poultry Section of the Royal Agricultural Show held at Preston in July, 1885, and died suddenly within five weeks (August 24, 1885). I well remember the date, because, away on vacation in Borrowdale, Cumberland, on the morning of the 26th a letter came to me from my friend the late George Hall, of Kendal, announcing the sad event. At that time I was Poultry Editor of the *Live-Stock Journal*, in which it was necessary to insert a memoir. Having no material there available, within half an hour I was *en route* to London, arriving between eight and nine that evening. The memoir was written that night, delivered to the printers next morning, and I was back at Keswick by six p.m., within thirty-one hours of leaving.

Mention has been made of Mr. James Dixon, who was another of the judges acting for love, giving his services freely for many years without fee, enabled thus to do by his successful business career. He died in comparatively recent times, and had long been known throughout the country. At one period he was a large breeder and exhibitor, pre-eminent in Hamburgs and Polish, but had kept nearly every other breed then known. A kindly-spirited man, he was a favourite everywhere. I believe the first prize won by me was at his hands, and recall the way in which he gave encouragement to the young breeder. Probably, though the soul of honour, his unsuspecting nature made him unable to cope with the machinations of certain exhibitors who were by no means uncommon in his day. He lived to a ripe old age, his closing years honoured in the Bradford district, where he lived, and by breeders throughout the country.

A many-sided man was Mr. J. K. Fowler, of Aylesbury, as his own published works testify. Cattle-breeding, politics, literature, and poultry all claimed his attention. The Prebendal Farm at Aylesbury was the most famous poultry establishment in the country at that time, because of its comprehensiveness. No breed seemed to be forgotten, though he, perhaps, had the greatest success with ducks. He was the premier importer of Leghorns into this country, and was elected first President of the Leghorn Club, the earliest specialist poultry club, whose foundation meeting, held at the Cannon Street Hotel in April, 1876, I attended, thus becoming one of the original members. Mr. Fowler was inspired during the poultry boom of the early 'fifties, and from that time onwards gradually developed his stock of



J. K. FOWLER.



EDWARD HEWITT



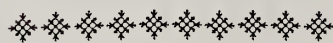
LEWIS WRIGHT.



JAMES DIXON



FATHERS  
OF THE  
POULTRY  
INDUSTRY.



RICHARD TEEBAY

poultry until it reached the topmost position which was about the time when I first met him. His universal success created a difficulty, and I well remember his saying in the Fowler residence that it was a mistake to show so generally as he had done, for by so doing others were discouraged, and thus the demand for high-class birds was lessened—a fact which has been abundantly proved in other cases.

Among practical poultry-breeders one of the first I knew was Mr. W. Trotter, of Bywell, Stocksfield, a large and successful Northumbrian farmer, who had given considerable attention to fowls on utility lines. In the *Journal* of the Royal Agricultural Society for 1851 (Vol. XII., Part 1) was published a prize essay written by him on this subject. He frequently acted as judge in the North, and I remember with interest his presiding at a lecture given by me at Slaley in 1893, when I reminded him that he had judged the poultry at a show held in that village forty-one years before. He had forgotten the event until the fact was men-

tioned. Often we chatted together on poultry topics before I left the North Country.

It was not until 1879 that I met Mr. W. B. Tegetmeier, who can claim to-day the high and honourable position of the oldest poultry-breeder probably in the world. Happily, he is still among us, though not seen of late by reason of his great age, for he is in the tenth decade. Breeder, judge, journalist, and author, he held a leading position over a very extended series of years. For a long time in poultry matters the *Field* was Mr. W. B. Tegetmeier, and he was the *Field*. It was in that journal that his great influence was exercised, as some of us have known, but in spite of all that we each and every one respect the doyen of poultrymen for his versatility and genius.

These brief notes have been suggested by the receipt of the first part of the "Book of Poultry," which will carry to the next generation of breeders an influence it has exerted for so long on their predecessors.

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## EARLY HISTORY OF THE FOWL.\*

### ITS HABITAT AND DISTRIBUTION.

By K. BOSE (Simla).

#### ANCIENT REFERENCE.

The pedigree of the fowl in India can be traced as far back as the days of Manu, the great Hindu law-giver who flourished in some unknown B.C. The "Institutes" of Manu was compiled about 1000 B.C., long after the passing away of the author himself, and gives an account of the fowl not only of his time, but also of subsequent periods. Reference to poultry is also traceable in later Sanskrit books, specially in Charak and other medical authorities. To unearth all the references from these voluminous works would be a huge affair, as it would necessitate the engagement of expert Sanskritists to find them out. The earliest history of the fowl that can be gathered from ancient works, though meagre, is full of interest. It is unfortunate that no attempt has been made to get a reliable account as to the treatment it received at the

hands of the ancient Hindus and subsequently the Mohammedans, and how its culture spread all over India from a restricted area, how it passed beyond the seas and was distributed in the islands of the Indian Ocean and in China; although theories are not wanting as to its Westward distribution. The early history of the fowl is closely associated with the history of the ancient Hindus, and a knowledge of the latter is essential to the study of the former. The fowl can claim a more remote antiquity than the Hindus can possibly do, as it existed in India from time immemorial—long before the Aryan hordes crossed the Hindu-kush and settled in the land of the five rivers.

#### COCK-FIGHTING.

These Aryans saw the fowl for the first time in India, its original habitat, and its fighting qualities appealed greatly to their own chivalrous nature, so much so that they became great champions of cock-fighting. Thus it was

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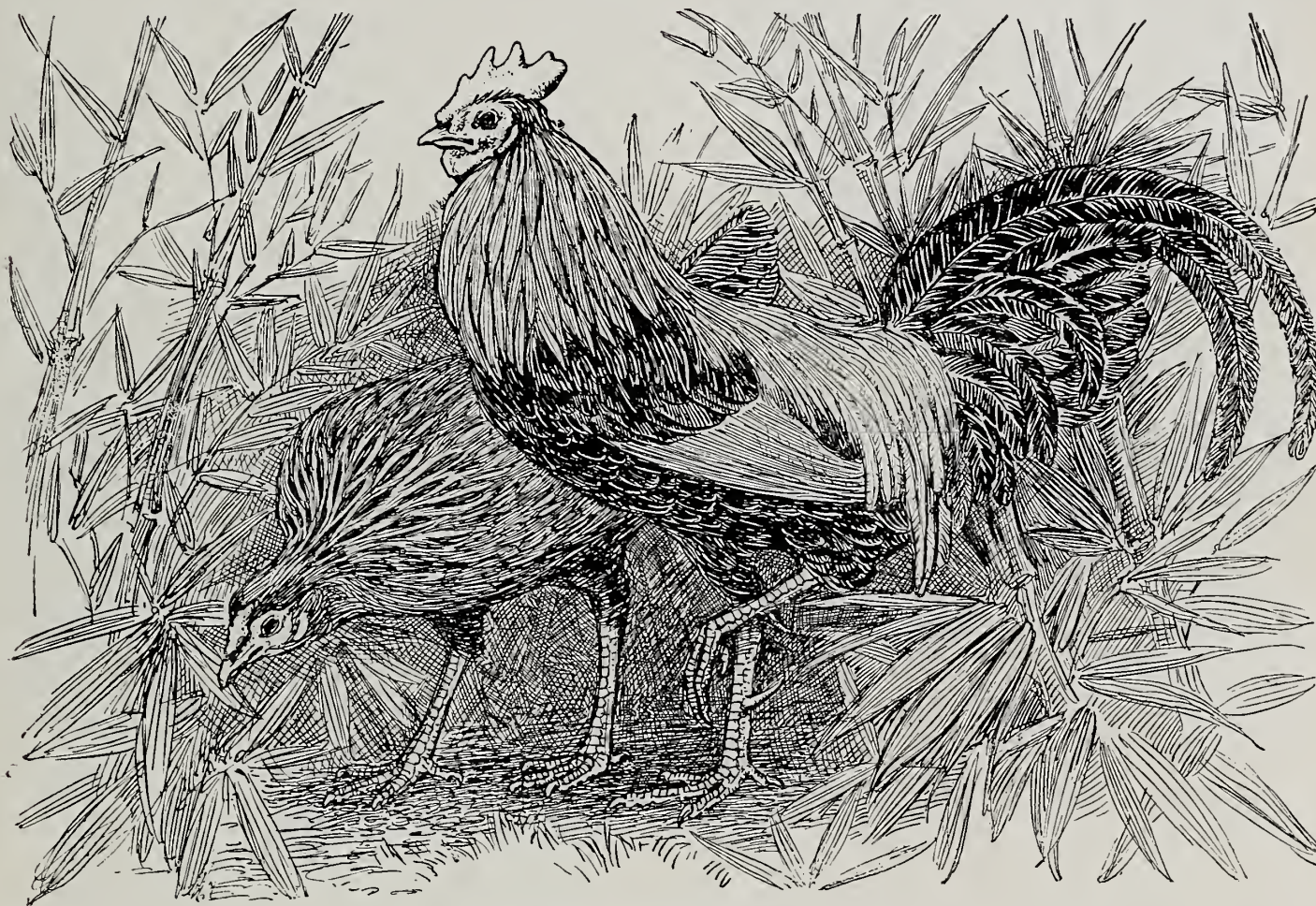
\*See "The Peregrinations of the Domestic Fowl." Volume I.  
ILLUSTRATED POULTRY RECORD, page 715 (Sept. 1909).

that the fowl was first domesticated, not for its food value but for its sporting qualities, and as days went on the pastime spread rapidly among the sporting section of the early Hindus, and even among their chiefs and potentates who had found a strong fascination in this novel art. It is probable that the Aryans learnt it from the Aboriginal tribes then inhabiting India, though it attained perfection in their hands.

#### MANU ON THE FOWL.

The great Rishi Manu, who apparently took

fowl, the Rishi Manu, no doubt with the approval of leading cock-fighters and guided by public opinion of his day, prohibited its use as a table-bird and advocated the use of jungle fowl in its place, as the latter could be had in abundance. It would not be out of place to mention here the qualities attributed to the two kinds of fowls by ancient Hindu medical authorities. The flesh of the jungle fowl is described as tough and light, and its juice is recommended as beneficial in cases of high fever and dysentery, while the flesh of the former is described as soft and extremely



Drawn by A. W. Seaby.]

**GALLUS FERRUGINEUS.**

[By courtesy of Edward Arnold.

much interest in the development of poultry culture for cock-fighting purposes, classifies the fowl as follows :

- (1) *Gramma Kukkuta*, village fowl.
- (2) *Banna Kukkuta*, jungle fowl.

The village fowl was the domesticated jungle fowl kept largely for cock-fighting, and by a system of careful breeding it soon excelled its parent bird both in size and stamina. Thus in course of time these two classes became quite distinct. It seems that, apprehending an attempt on the part of the villagers to utilise as their food the comparatively small number of village

palatable, though not easily digestible, and is considered a powerful tonic.

#### HABITAT AND DISTRIBUTION.

It is impossible to locate with certainty the exact habitat of the fowl, but for many reasons I am inclined to think it must have been Northern India, probably the Punjab. Wild fowl is seldom seen nowadays on the plains of India, but it still abounds in large numbers in the Western Himalayas, the central chain of which forms its principal abode. Unable to withstand the rigours of the Himalayan winter, these poor creatures leave their abode at its

approach for a more temperate climate ; and as they fly toward Simla they fall an easy victim to sportsmen. The birds thus killed are brought to Simla and sold to the Hindus. The Punjab seems to have a greater claim as the original habitat of the fowl than any other parts of India. From the Punjab the fowl was distributed all over India as the Aryans founded settlements in Behar, Bengal, Berar, and conquered Southern India. That the jungle fowl was a great flyer there can be no doubt, and this trait, though greatly lost through domestication, can even be seen in its descendants, the common country fowls found in all parts of the country, which very often fly from tree to tree and roam about a village. I have seen some flying a distance of forty feet and attaining a height of thirty feet. This, coupled with the fact that wild fowls come to Simla from their northern quarters at the approach of the winter and go back during summer, leads me to believe that the fowl covered a considerable area outside its original habitat without human aid.

#### OFF TO THE ARCHIPELAGO.

With the increase of civilisation among the Hindus, commerce and colonisation commenced. Many of them sailed away and founded colonies in Socotra, Ceylon, and also in Sumatra, Java, Bali, Lombok, and other islands of the Malay Archipelago, and an active commercial relation between them and the Mother Country was maintained. It was at this period that the fowl for the first time left the Indian shore and was distributed in those Indian colonies. From the islands of the Malay Archipelago it found its way to China, though also, at a considerably later period, it was probably taken along by Chinese travellers who visited India. Fa Hian, the celebrated Chinese traveller, who came to India in the early part of the fifth century A.D., tells us that he sailed from Bengal to Ceylon, and from Ceylon to Java and thence to China, in merchant vessels manned by Hindu crews. The theory advanced by some Western authorities that the Buddhist priests were the chief agents for the distribution of the fowl in China, who carried it for the supply of eggs and flesh, may appeal to Western people, but in India, the birthplace of Buddhism, we know that this could not have been the case at that time. The Buddhist religion enjoins its followers to keep the lives of all animals sacred, and this was rigidly observed by Indian Buddhists of those times.

#### IN MOSLEM CUSTODY.

When the Mohammedans invaded and conquered India, cock-fighting was not a new

pastime for them. The Persians who had invaded India towards the close of the sixth century B.C. learnt the art from the Hindus, and subsequently it spread Westward. The Mohammedans gave the pastime their cordial support, and their enthusiasm certainly exceeded that of the Hindus, but it is astonishing how quickly the sport passed altogether into their hands. The fighting-cock, however, is still sold in Tollygunj and some parts of Behar. And wherever it is maintained for sport, the fighting-ram, with its brass-plated forehead, is maintained, too. The jungle fowl was becoming scarce owing to the rapid increase of population, and the Mohammedans domesticated large numbers of them for their food supply, but took no special care for their breeding. Thus poultry-keeping entered upon a different era altogether. It seems probable that with the domestication of the jungle fowl by the Mohammedans the Hindus began to look down upon the bird.

#### MANU MISINTERPRETED.

The fowl which one sees in Indian markets and which is sold as a table-bird is the direct descendant of that ancient jungle fowl (*Banna Kukkuta*) mentioned by Manu and subsequently domesticated by the Mohammedans, while the ancestry of the modern Aseel, the Chittagong, and other varieties of the Indian Game can be traced to the village fowl (*Gramma Kukkuta*). Though the latter have now deteriorated a great deal through crosses upon common poultry, still, many are claimed as pure, as having descended from the original stock of village fowl unmixed. The prohibition by Manu of the use of village fowl as table-birds has had a far-reaching effect, inasmuch as it was even observed by the Mohammedans, and though he never forbade the use of jungle fowl in the kitchen, it is surprising how the real intention of the great law-giver, who did so much to encourage poultry culture, was misinterpreted later on, with the result that the fowl finds no place in the dishes of the modern Hindu, though his forefathers were not afraid to eat it. This mistake, however, is now being gradually realised, specially by the educated Bengalis, and the fowl often forms the principal dish in fashionable festivities.

#### DAWN AT LAST.

Now that an awakening is visible in every sphere of Indian life, the poultry world will ere long, we hope, be filled with enthusiasts, not for reviving the old sport of cock-fighting, but for the improvement of the old Indian breeds and the development of poultry culture in its various branches.

## POULTRY THROUGH THE MICROSCOPE.

## IV.—THE STRANGENESS OF PARASITES.

WRITTEN AND ILLUSTRATED BY JAMES SCOTT.

IF poultry-keepers were fully aware of the losses that are incurred on account of pests attacking their birds, they would not leave the slightest opportunity for insects to gain any pernicious influence. I propose to deal with this subject, and dare say that I shall repeat information already known to some readers; yet to omit any references would make the article incomplete. In a general way, insect pests are divisible into three groups—namely, fleas (*Pulicidæ*), lice (*Mallophaga*), and mites (*Acarina*), to which must be added the gapeworms.

Fleas and mites “bite” by means of either elaborate or single needle-like piercing and sucking apparatus; while the lice (which are different from the *Pediculidæ* of mammals) wound with side-working jaws.

It is an astonishing fact that the eggs, or “nits,” of lice are often most beautiful in formation; though this fact is not evident un-

multiplication. Dark, damp, badly-ventilated houses and runs favour them. Insects, like everything else that possesses life, propagate from parents, and are never spontaneously created. It is due solely to the minuteness



FIG. 1.—PARASITE'S EGGS, MAGNIFIED.

These are in natural size mere specks. The first is from the pheasant, the middle one from the turkey of Japan, and the third from the hornbill. Those that infest fowls are similarly modelled as tiny pots. [Copyright.]

til the objects are considerably magnified. Some of the best examples are depicted in Fig. 1, each having a lid that is raised by the emerging insect when hatched.

It is a mistake to suppose that breed, irregularity of meals, uniformity or lack of food have an effect towards inducing the appearance of vermin. The reason that they thrive is because the surrounding conditions permit



FIG. 2.—A MAGNIFIED MAGGOT.

When silvery white maggots, of lively disposition, are found on poultry, or in the nests, they are the immature fleas. A full-grown maggot is about 1-6 inch long; but younger ones range downwards to such tiny sizes as to be hardly observable. [Copyright.]

of their eggs, and their young, that false notions have arisen on this point.

It is a curious fact that the parasites of one group of birds find it impossible to live on the members of another tribe. As an instance, fowl-lice and mites cannot exist on ducks; nor can duck pests live on fowls.

The fleas, named *Pulex gallinæ*, are at first—as is the case with domestic or house fleas—small, wriggling, white, brown-headed maggots, as in Fig. 2, which hatch from eggs that have been laid a few days. Within from ten days to three weeks, according to the warmth and mugginess of the weather, these maggots change, after reaching their mature length of 1-6 inch, into pupæ, or helpless objects not unlike the perfect insects. The latter appear within about two or three weeks after such a change. Each maggot weaves a bag, or cocoon, so that it may undergo its change therein. These objects look like tiny pieces of fluff. As the fleas breed all the year round they may become intolerable. They attack their victims mostly at night; and as they are hardly

observable during the day, many keepers do not suspect that the loss of condition and other signs of illness are often caused solely by these nimble creatures. Being deprived of rest, and intensely worried at the same time, the birds become listless, and lose their zest, during the day. Straw nests are great offenders in en-



FIG. 3.—A MAGNIFIED FOWL LOUSE.

Very small actually, named *Lipeurus variabilis*. These are often very abundant on fowls. [Copyright.]

couraging the multiplication of the pests, which make a poor sitting hen's life a round of torment. It should be noticed that these fleas form a species distinct from those that worry mankind.

Among lice, of which there are at least eight distinct kinds, the chief specimen is *Lipeurus variabilis*, shown in Fig. 3. This becomes very numerous among primary and secondary feathers, and is yellowish in colour, with fawn spots and dark lines, the arrangement of which is not at all definite. From six to ten days is the period that elapses between the time of egg deposition and hatching, when the *very tiny* lice appear, and have to moult their skins repeatedly (often a dozen times) to allow for growth to their mature size. The male is about 1-13 inch long and the female about 1-11 inch.

It should be borne in mind that lice and mites remain permanently on their hosts, as the victims are called, while the fleas leave them at various times, and hide. It is customary for some lice to drive their snouts into the flesh and remain for long periods erect in an inverted position. These pests remove a lot of blood, and thus considerably weaken the birds. Some species of lice are much broader and flatter than the one illustrated.

The red mite (*Dermanyssus avium*) also comes from an egg. It may be almost white,

or silvery, in some stages, notwithstanding its name. The red colour depends chiefly on the blood sucked up. As the pests conceal themselves during the day and feed only at night, many keepers who imagine that their birds are free from them are thereby misled. Fowls have actually been known to die through this pest, yet the cause has been unsuspected. Indisposition can often be traced to the actions of the mites, which, strangely enough, can exist for months without any contact with fowls. The powder, the presence of which denotes that of the insects, consists of their cast skins and granules of matter connected therewith. Remedies may be selected from those hereafter given.

Mites, when mature, always have eight legs. Among those which aggravate poultry are two especially troublesome kinds, called *Sarcoptes laevis* and *Sarcoptes mutans*, see Fig. 4. To the former is due the depluming scabies or itch. The mites are mere specks. They feed at the base of the feathers, and it is owing to the persistent efforts of the birds to peck them out that the "feather-eating" vice is acquired. The point to bear in mind is that the presence of the mites, and *not* a fondness for feather-eating, is the cause of the habit. April is the month when this mite appears to be most

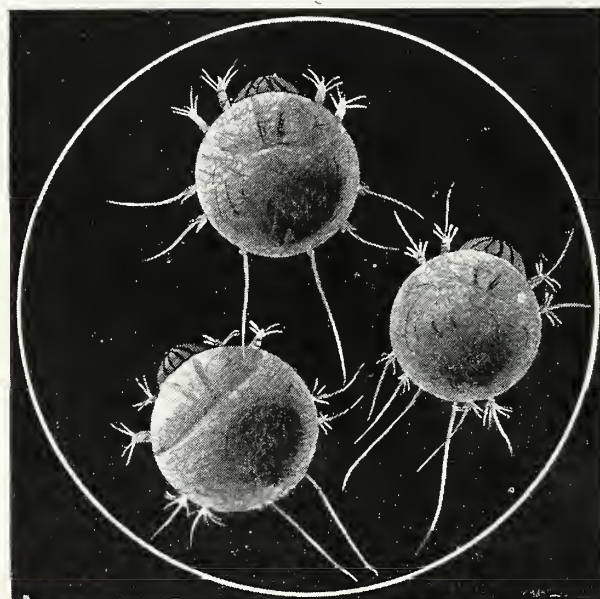


FIG. 4.—MAGNIFIED ITCH MITES (or *Sarcoptes*).

Which, by irritating the fowls, induce the so-called "feather-eating" habit. These are really very small specks, and it is to peck them out that the birds interfere with the plumage. [Copyright.]

active. They usually commence on the rump, and spread towards the neck and head. As they feed on the softer parts of the feathers and on the torn skin, a powder is brought into existence consisting of scraps of feathers and the cast-off skins of the pests. The second mite mentioned—*Sarcoptes mutans*—is more

serious, and is responsible for that abominable disease, scaly leg, in which the most prominent symptoms are elevations of the scales of the legs, with development of repellent crusts and lumps underneath and upon them. The affected birds may become quite lame. The mites live and multiply by means of minute eggs in these excrescences; thus rendering it a very contagious malady.

When either of these pests has gained sway, it is preferable to isolate the birds for treatment. Bathe the afflicted parts—in scaly leg—with hot water. Then gently remove the crusts without causing blood to flow; and apply an ointment composed of one part creosote and twenty parts lard. A mixture of equal parts of flowers of sulphur and vaseline has also proved efficacious. A few days after this treatment the limbs should be washed with hot water and soap.

The creosote and lard remedy can be well rubbed in to destroy the depluming mites. Vaseline may be substituted for the pig-fat. Oil of cloves is another good remedy. So, too, is pyrethrum (*i.e.*, Persian insect) powder, dusted over the body after the feather bases have been moistened with soapy water. Use this for the red mite also.

The terrible disease gapes has no connection whatever with insects, and is due entirely to the presence of small reddish *Nematode* worms of the kind shown in Fig. 5, in the windpipe. They are named *Sclerostoma syngamus*, and *Syngamus trachealis*, or popularly, forked worms, for the following peculiar reasons. The female is about 5-8in. or 4-5in. long and the male about 1-3in. or 1-5in. long. The latter is generally in company with the former, thus causing the customary appearance. Each is provided with a circular sucking mouth containing a row of six horny lancets, by means of which it fastens on to the mucous membrane. If these worms are allowed to multiply in the throat, they half choke the poor bird, which continually yawns and stretches its neck strangely, showing meantime signs of affected breathing. The plumage gets ruffled, wings droop, and occasionally froth appears in the mouth. Eggs are not ejected from this pest while alive, but are liberated when their dead bodies burst, after a few have been coughed up.

Sometimes earthworms may consume a few of the eggs, which thus readily pass into a bird that picks up one of the creatures. Wild birds have been known to drop the egg-laden pest on to the poultry ground, whence they spread among the food and so get into the throat. Month-old chickens are most sus-

ceptible to this pest. To get rid of it, the diseased birds should be isolated, and into the mouth of each must be placed, every few hours, from five to fifteen drops of a mixture composed of one part spirit of turpentine and two parts of olive oil. It may be applied with a feather, the operator reaching down the windpipe as far as he can probe, and turning the feather round meantime. If a bird appears to be choking, pierce the windpipe with a sharp knife, remove the worms, and then stitch it up. This plan should be undertaken by someone very skilful.

In bad cases an almost red-hot brick should be placed in the bottom of a very large pail, and then a little carbolic oil, or preferably sulphurous acid, be poured over it. The affected bird should have been imprisoned in a basket, which should then be stood in the pail



FIG. 5.—GAPEWORMS MAGNIFIED.

Which cause the terrible disease of that name. By getting into the windpipes they cause inflammation that often results in suffocation of the birds. Their length never exceeds 5-8in. They are red in colour; and are generally forked. [Copyright.]

over the brick, *but not in contact with the latter*. By throwing a cloth over the lot, the fumes can operate. When the bird is nearly suffocated it should be let loose in the fresh air. It will be weak for some time; but the worms will probably be destroyed. Several birds may be put into a large box, and then Camlin powder, or finely-ground camphor and lime carbonate (chalk), be blown into the receptacle. Fits of coughing are thereby induced, and these cause the worms to be ejected in the expectoration. Runs should be salted and limed. Birds that die of gapes *must be burnt*, not buried, if we wish to stamp out the disease.

## THE DAIRY SHOW.

By WILLIAM W. BROOMHEAD.

TIME flies. It seems but yesterday that we were looking forward to a week's hard work at the great event of the chicken season; yet to-day it is a show of the past, and we are ready for more. Possibly some exhibitors who were eager to give their birds a trial at the great Islington fixture and "failed to catch the judge's eye" have forgotten all about their sorrows—joys remain, and are handy when the advertising season comes around once more! Well, in an exhibition of such magnitude there must always be some good birds which fail to get a card; and those birds which were tried and failed may be tried again—and win. This has happened before now; it will happen again. In some instances birds which scored cups and specials at the previous month's shows had to be contented with minor awards, maybe to the surprise of others than their owners; but it would kill competition if a winner at the first event of the season could win all along the line.

The "Dairy" takes place about the same time each season, during the first week in October, and this year's event was held on the 4th, 5th, 6th, and 7th ult. Viewed from the poultry fancier's point, it was a decided success, much more so than last year's show. Not only was it better numerically—the total of entries, including thirteen "a" numbers, three of which were from Holland, was 3,271, as against 3,034 in 1909—but, generally speaking, there was a more finished look about the birds, they were in very forward condition and better feather. Last year, too, almost a score of classes were cancelled, but only four were struck out last month. I admit that at a big show I do not like to see late entries—I am taking it for granted that an "a" attached to a number signifies that the entry was taken after the closing time—neither do I like to see cancelled classes. One of these was for Rose-combed Anconas, and there must be some good specimens of this sub-variety in the country, nay, there are, since I have judged some already this season. Then, again, Dark Brahma, Buff Cochins, and Black-Red Modern Game cockerel classes failed to fill. However, it was a great show, and one of the best of the many that have been held under the auspices of the British Dairy Farmers' Association.

Several notable yards were represented in the breeding-pen classes, and among the birds exhibited I have not seen a better lot of cockerel-breeding Dark Brahmas than those which won second in the class for feather-legged fowls, although the winning Buff Cochins were superb. The medal in this section went to Partridge Wyandottes, cockerel breeders, and the male bird was equal to, if not better than, any which have ever been shown. Dorkings were up to the usual, and the breed well maintained its reputation. A coloured pullet won the medal, although the Silver must have been very close to it.

Langshans were hardly up to the numbers one expects at the Dairy, although quality was particularly high. The Black pullet gained the medal—for which, by the way, the Coads did not compete—but had it been awarded to the winning Black cockerel there would have been no room for complaint. Blues had one class with half a dozen

entries; with a specialist club for the variety I, for one, expected better things. The Coads were very strong and out-distanced the "Moderns" in numbers this year. Quality, too, was as good as I have seen. The winning cockerel was a particularly fine bird, and although the first prize pullet was a trifle small, maybe, she was the pick of the basket; and had she been catalogued at £20 instead of £2, some fanciers would have thought more of her!

Despite the cancelling of the class for Dark cockerels, Brahmas made a fine collection; and the same may be said of the Cochins. Minorcas came up well, but quality at the Dairy in this breed has been much better. Houdans, also, were not over good, and beyond the winners, which stood well away from the remainder, there was nothing of great merit. Faverolles, on the other hand, showed a good advance; and Malines were fairly well represented. Campines were somewhat disappointing, and not a Gold was on view; I wonder at the executive catering for the Gold, even along with the Silver, since it is to all intents and purposes a dead variety. Hamburgs made quite a good display, and some really excellent specimens were on view. Game, both Modern and Old English, were rather better than usual, but there was a poor show of Black Sumatras. Malays came out well, and the same may be said of the Indians.

There was not a big entry of Andalusian cockerels, but quality was up to the average, while pullets excelled in both points. Leghorns were representative, with Browns, Whites, and Blacks well to the fore, and quite a nice lot of Blues. Plymouth Rocks made a fine display, and seldom, if ever, have better Barred been shown. Buffs and Whites, too, were well to the front, and although Blacks were hardly as numerous, they were a nice lot. The Barred pullet won the champion prize for the best hen or pullet in the show, thus repeating her Hayward's Heath performance. Wyandottes were about up to the mark, but the Partridges did not strike me as a particularly good lot. The winning Silver cockerel gained the champion prize for the best cock or cockerel, and like the Rock pullet followed up his Hayward's Heath success. Over 300 Orpingtons were entered, and they made a show by themselves. The whole colours were particularly strong, and the winners were nicely selected, although some of the birds which secured cards were as good as those which got in the money, and the claiming of a Buff pullet (h.c.) for £100 goes to prove this, I think. In Jubilees the Hayward's Heath cockerel won his class well, while the Spangled cockerel was another remarkably fine specimen. Sussex showed a decided advance, and fanciers of this breed are to be complimented on the excellent manner in which they penned their birds. Anconas were very good; and I have seldom seen a finer display of Silkies, the winners being put down in rare condition, a difficult thing with this quaint breed. The Yokohama classes were for birds of any age, hence some well-known winners turned up. Beyond a couple of "Bosnians" and a Blue Rock there was nothing startling in the Any Other Variety classes, but a Rose-combed Barred Rock won second prize in the pullet class.

There was a very fine display of Bantams; and the same may be said of Water-fowl. Rouen and Aylesbury ducks were well up to the usual, but there was not a strong entry of Pekins. Buff

Orpingtons came up very well indeed, while more than half of the entries in the A.O.V. (duck or drake) classes were Blue Orpingtons. The Toulouse geese were a good lot, and the Embdens made a very interesting display. Turkeys were numerous and good, there being some fine Whites, a nice lot of Bronze, and one or two Buffs. I note in the classes for other than White turkeys some of the birds were entered as Bronze, others as Mammoth Bronze, a dozen or more as American Bronze, and three as American Mammoth Bronze! The variety evidently lacks a universal name.

## TABLE - POULTRY AT THE DAIRY SHOW.

THE table-poultry section of the Dairy Show was, on the whole, extremely satisfactory, some very fine specimens being staged. There were one or two disappointing classes, it is true, but, generally speaking, the quality of the exhibits was well up to the average of the last few years. There were two hundred and twenty entries in all, but several absentees and couples that had arrived too late for competition reduced this total to about two hundred. The birds were very conveniently staged and the light was excellent.

The Dorking cockerels were rather disappointing, but the pullets were excellent in every way, possessing flesh of first-rate colour and quality. Several of the cockerels were somewhat coarse, while in a few instances they had not been particularly well fattened. The Sussex chickens were extremely good, and, on the whole, were superior to the Dorkings. Both the cockerel and the pullet classes were well filled with birds of superb quality, possessing all the necessary requirements of good table-chickens. A very interesting feature of the remaining pure-bred classes was the predominance of the Buff Orpington. Twenty cockerels and ten pullets were entered in the two classes, of which no fewer than thirteen cockerels and seven pullets were of this variety, while practically all the awards went to Buff Orpingtons. So far as quality was concerned, some of the birds left a good deal to be desired, but some, on the other hand, were of extremely good quality.

The classes for cross-breds were, on the whole, rather better than those for pure-breds, and it is worthy of note that the couple which were awarded the gold cup for the best birds in the whole Show were a pair of cross-bred chickens. The two classes for Dorking crossed with any other pure breed were pretty good, particularly the pullets, some of the cockerels being rather coarse. The Indian Game appeared in many of the exhibits, while other crosses that were represented were Sussex-Dorking, Dorking-Orpington, and Dorking-Plymouth Rock. The classes for any other cross were well filled, there being twenty cockerels and twenty-one pullets. The gold medal for the best couple of chickens in the Show was awarded to a pair of Indian Game-Buff Orpington, and they well deserved their position. Among other crosses that were exhibited were Buff Orpington-Sussex, Indian Game-Sussex, Wyandotte-Rock, Faverolles-Rock, and Houdan-Orpington.

Two classes were provided for farmers and cottagers who are *bonâ-fide* rearers of chickens,

fed under natural conditions and not crammed, which proved very popular, there being no fewer than fifty-four entries in the two classes. These classes are ones that should be well supported, since they are specially intended to encourage those who are not professional fatteners. The cry has been for some years past that table-poultry shows offer no inducement to the farmer or cottager, and it was to overcome this objection that these classes were inaugurated last year. Some of the exhibits were very good indeed; some, of course, were of not very fine quality, but on the whole the classes were eminently satisfactory.

The ducks and geese were disappointing. There was a large number of ducks, but with two or three exceptions they were very poor. The class for goslings was the most unsatisfactory in the show, the majority of the birds being of a poor colour and quality.

## THE ORLOFF FOWL AND ARSAMAS GOOSE.

ONE of the results of the International Poultry Congress, held at St. Petersburg some years ago, was the making known to Western breeders of breeds of poultry which had hitherto been unknown. It cannot be stated that these have become at all popular elsewhere. A few were

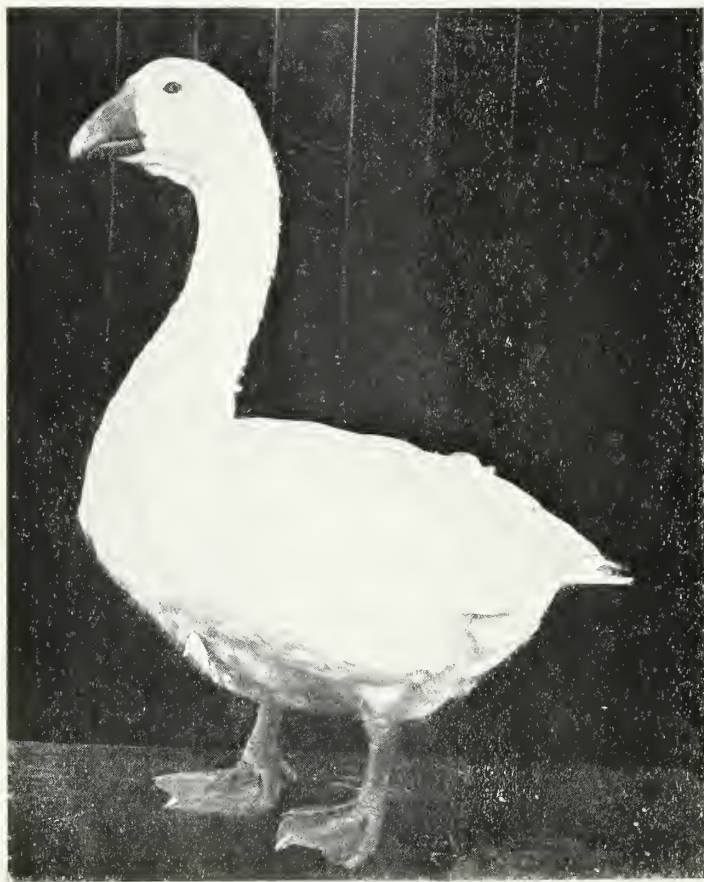


AN ORLOFF COCKEREL.

[Copyright.]

afterwards imported into Britain and Belgium, but either did not possess qualifications commending them, or have failed to attract the attention of exhibitors, whose co-operation is necessary to the success of any new breed or variety. Some of these Russian poultry were of extreme types, those now described and illustrated being examples.

Of the Orloff Fowl there appear to be three varieties—namely, Red, Speckled, and White, the first-named of which is very remarkable indeed in the colour of the cock's plumage, which is a dark, reddish-brown, almost like mahogany, and burnished as if polished. In no other breed we have met with is there the same brilliancy. They resemble the Indian Game in size and shape, being tall, upstanding, flat-fronted, heavy in bone and weight. Adult cocks scale 9lb. to 11lb. and hens 2lb. less. Apart from colour of plumage and shape, among the leading features of this breed are



AN ARSAMAS GOOSE.

[Copyright.]

the medium-sized but wide head, prominent eye-brows, and cut-berry-like comb lying close to and across the top of the skull. Ear-lobes and wattles are very small, and the neck hackle full. The accompanying illustration, for which we are indebted to M. Robert Pawels, of Everberg, Belgium, was taken when the specimen was somewhat rough in feather, but represents excellently the type of this breed. As a further indication of its relation to the Malay, and, therefore, the Indian Game, may be mentioned that the Orloff has bright yellow legs and feet and skin. Probably all own the same ancestry, one finding its way to Europe by Central Asia and the other by the longer but quicker sea route. In respect to productiveness, the resemblances are still further emphasised. A moderate

layer of very rich eggs with deep-tinted shells, it is better in flesh qualities, carrying a large amount of muscle, which is, however, somewhat dense and hard, for which reason it is better to be used as a cross on soft-fleshed races than when pure.

It will be remembered that at the Second National Poultry Conference, held in 1907, there was exhibited a pair of Arsamas Geese, sent by the Director of the Russian Ministry of Agriculture, a photograph of one of which is here given. These birds are bred in the centre of Russia, where is also a grey variety known as the Tula, from the Government of that name. The peculiarity of these two races is the powerful head, neck, and wings, and the short, strong beak, explained by the fact that at one time they were used for fighting purposes, which pursuit has been followed for a long period of time. In one of the later editions of Mowbray (1842) he says that at St. Petersburg they have no cock-pits, but they have a goose-pit, where, in the spring, they fight ganders, trained to the sport, and so peck at each other's shoulders till they draw blood! Bred for this purpose, egg-production is a very secondary consideration, and they are poor layers, but carry upon the body a large amount of muscle, which if well hung after killing is fine in flavour. They do not, however, fatten well. Matured Arsamas ganders often weigh 20lb., the Tula variety being 4lb. less.

## THE PARTRIDGE WYANDOTTE.

ONE of the most popular breeds of recent years is the Wyandotte, and of its numerous varieties and sub-varieties—there are some twenty or so at the present time—none has been more to the front than the Partridge. It was said at one time that this variety had got to the top and was on the down grade; but there is still a good call for Partridge Wyandottes, and the hon. secretary of the club which looks after its interests will see to it that its popularity does not wane. And rightly so, since for combined purposes, exhibition and utility, it can hold its own with many others.

That the Partridge Wyandotte is one of the most handsome varieties in existence cannot be gainsaid. The cock's top colour is bright red, his breast and tail are glossy green-black, and his hackles, shading from rich red to pale orange, are marked with a sound stripe of glossy black down each feather. The hen is of a soft brown colour, her hackles being of a rich lemon shade, and the remainder of the plumage finely and evenly pencilled—following the outside form of the feather—with rich black. In each sex the head appendages are bright red, the eyes bright bay, the beak horn shading into or tipped with yellow, and the legs and feet bright yellow.

As with most varieties of exhibition poultry, to obtain good show specimens of both sexes of Partridges it is absolutely necessary to follow the double mating system. Nevertheless, to breed representative birds, no matter whether males or females, is not so difficult as with other breeds which could be mentioned; it is a matter of strain. And given a pen of well-mated Partridges from a reliable yard—and there are many such in the country—prize-winners will be forthcoming, and success will continue with those fanciers who go into the question in a proper manner and line-breed their stock.



PARTRIDGE WYANDOTTE HEN.

1st and Cup, Crystal Palace, 1909. The property of Mr. Hubert Wright.

## NOTES ON TURKEY-FATTENING.

UNTIL the time young turkeys are nearly six months old the method of rearing and feeding is the same whether they are intended for the spit or to be used as breeding stock. The time has now arrived when the two paths diverge, and the treatment must be totally different. Those intended for breeding should continue under normal conditions, be given as much liberty as possible, find the greater part of their food, and thus store up a reserve of constitutional vigour to be handed on in due time to their progeny. They will grow much more leisurely than those specially treated, but this is all to the good, as forcing would be harmful. On the other hand, the first-named class must be subjected to influences which, and be fed in a manner that, will tend to softening of the muscles by fatty deposits, and to an increased quantity of flesh. It will be realised, therefore, that what is suitable for one is totally unsuited to the other. Stock farmers do not feed all their beasts alike, or retain for breeders those which they cannot sell or which have not made full growth, and turkey-rearers should, in the first place, select the best of their flock as future breeders. That principle needs no advocacy, though often disregarded.

Division in the way indicated should be made in September or October according to the period of killing. In America, for Thanksgiving, the former month would be the right period, whereas in Europe for Christmas sale the latter is preferable. When selection has been made, those intended to be retained should be entirely separated from the killing flock, and the latter brought into a measure of restriction with a view to gradually accustoming them to confinement. Where the flocks are large it will be desirable to divide them into lots of thirty to fifty, graded in accordance with their size and sex, for by so doing better results will be secured than if they are in larger companies and mixed in respect to stage of development. The object is to bring the smaller and more backward birds forward, which can only be done if they are given a fair chance.

For the accommodation of the fattening turkeys a large, roomy shed is desirable. Upon many farms a barn or well sheltered cart-shed is available for the four weeks during which it will be occupied. Where the flock is moderate in number the latter is usually sufficient, and avoids the necessity for special buildings. Whatever is used should be well ventilated, and in a barn a false barred frame should be fitted so that the ordinary doors may be left open all the time. As the birds will be inside during the greater part of the twenty-four hours, there must be no overcrowding, and it is better to err on the safe side. Perches should be fitted three feet above the ground, and the floor should be well littered with straw or dry leaves. During part of the day the turkeys may be given access to a large yard or small paddock, and a boy left in charge to prevent wandering, or the area allocated be fenced in. Considering the season of the year, it is seldom wise to permit them to enter woodlands, though if the house is near, and the weather is very fine and bright, an exception may be made, provided that someone is herding them.

Hoppers should be provided with coarse grit, sand, slaked lime, or old mortar, and charcoal, so that the birds can help themselves freely in accordance with their instinct. The plan commended is to have a hopper with four compartments, in each of which one of the above will be placed, for by so doing we can discern which has the greater value and is needed in the greater quantity. An experiment conducted on the College Poultry Farm, Theale, in respect to the "Growth of Chickens and Cost of Rearing," revealed that the average amount of grit used from hatching to the end of the thirteenth week was nearly  $\frac{1}{2}$  oz. per bird per week. On that basis a 20lb. turkey would probably require at least 10oz. to 12oz. per week, but we have no evidence as to the amount of charcoal that would be consumed. How far the use of these materials would prevent bent breastbones and leg weakness remains to be proved.

Market requirements must be taken into account



AMERICAN BRONZE TURKEYS. [Copyright.]

when determining the food used during the fattening period, and also cost. It is no use, however, to cheapen at one end and reduce the ultimate returns. In this connection we are compelled to consider such food as is indigenous to the country. European markets demand white flesh and skin on the birds. No matter how plump and soft in flesh, a yellow-skinned turkey would realise a much lower price per pound than if white, and would be discarded by high-class traders and consumers. On the other hand, in America yellow flesh is not objectionable, and in many cases is preferred. Hence the chief food across the Atlantic is maize or Indian corn, the effect of which is to give the colour desired. That grain adds to the weight by its high proportion of fat, is sweet, and liked by the birds, but to Western European eyes the chumps of yellow fat produced by it are not at all acceptable. An abundance of soured skim or butter milk would to some extent counteract this influence, but not wholly.

Therefore, ground oats, wheatmeal, buckwheat-meal and barley-meal are usually employed, and in many cases cooked potatoes or beetroots are mixed with the meal in the proportion of one part of the

roots to two parts of the meal. To this is added enough soured skim milk or butter milk to make the whole into a porridge about the consistency of very thick cream, perfectly smooth and thoroughly mixed. It will be desirable to allow this food to stand several hours after mixing so that a slight fermentation will take place, which has the effect of breaking down the fibre and increasing the digestibility. To this should be added about  $\frac{1}{2}$  oz. of pure fat for each bird. In any case this mixture will form the morning diet. Some of the best feeders give the same in the afternoon, supplementing it with a little steeped grain, such as oats, or wheat, or barley, whereas others prefer to give the last-named alone at that time of day. On the Continent of Europe, a few acorns, beech nuts, chestnuts, and even walnuts are given to the turkeys, who are very fond of them. It is thought that these give a desirable flavour to the flesh, but they have a tendency to harden it.

Two good feeds a day are quite enough, for the birds eat more heartily and digest the food completely; except that vegetables and roots may be supplied about midday. The last-named in the shape of turnips or beet are given raw. In fruit countries apples are often supplied instead of roots. Food should be given in troughs, which must be kept clean, and only as much as is eaten readily. Care is necessary that enough troughs are provided, so that every bird can secure a full share.

Some of the finest turkeys I have ever seen were crammed, but it is not easy to handle a 20lb. or 25lb. bird. One breeder who adopted this method gave it up, as he did not find the results enough to pay for the additional labour.

One of the main reasons for subjecting turkeys and other poultry, as also animals, to a process of fattening is to soften and make more palatable the flesh. This is accomplished by displacement of the water, of which the muscles are so largely composed (72 per cent.), to some extent by globules of fat, these adding to the bulk and improving the quality, obviating that dryness of meat which characterises lean turkeys. Such should not, however, be supplied beyond the capacity of the flesh to carry. Any fat beyond that quantity is deposited upon the internal organs and intestines, and in masses under the skin, specially along the breast muscle and above and below the stern. The former cannot be avoided, but the latter is undesirable, as it is wasteful. If the process be continued too long, congestion takes place and disease will assuredly follow. Over-fat birds are gross and too rich, so that such a condition should be avoided. Four weeks is generally regarded as sufficient to bring birds into fit condition, though the period can be extended by giving food in limited quantities during the first two or three weeks.

Increase of weight will depend to some extent upon the size of frame when fattening commences. We cannot expect that a 12lb. bird will put on as much weight as one that starts with 18lb. to its credit. But healthy birds properly fed will add about one third, say, 4lb. on the former and 6lb. on the latter, sometimes more. I have known turkeys increase 8lb. as a result of four weeks' feeding, that is 2lb. per week, but these are exceptional. Unfortunately, we have no reliable data as to the cost of fattening, but that the gain in value is much greater than the expense is unquestionable.

E. B.

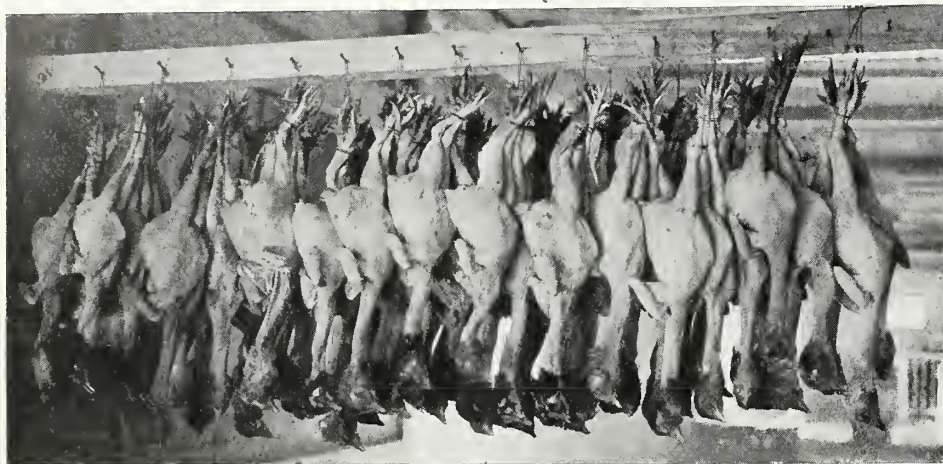
## FATTENING CHICKENS FOR CHRISTMAS.

By A SUSSEX FARMER.

IT is useless waiting until within a week or two of the festive season before making preparations for supplying the great demand for chickens at Christmas. Most farmers make a special feature of the excellence of their Christmas geese and turkeys, both doubtless very profitable when conducted on the right lines; but frequently, by neglect of several of the cardinal points, the maximum of profit is not reached. Chicken preparation is apt to suffer from the same neglect. The demand for chickens is very great. They reach excellent prices both before and after the demand for the larger and more expensive members of the poultry-yard. But to obtain the best prices for table-chickens at Christmas, they certainly should undergo some form of preparation, and this is too often neglected. The birds being allowed to run about until the eve of killing, with the result that when slaughtered the flesh is hard and tough. It is often said that these birds do not carry the same amount of flesh as those that are penned up. With this opinion I most emphatically disagree. Birds that are allowed to roam all over the farm during the hay season, on harvest stubble and on permanent pasture, not only grow a large frame, but the frame is abundantly covered. Where these birds do not satisfy those consumers who ask for quality rather than quantity is in the hardness of the flesh; it is of a stringy, muscular nature, and is absolutely devoid of the delicacy required in a first-class table-chicken. To obtain, therefore, this delicacy, care must be taken not only in the final preparation, but also in the treatment leading up to the finishing stage. For those who intend to cater for the Christmas trade, the first *sine qua non* is the selection of the breed. Upon this point alone many fail to obtain the prices that otherwise might be secured. To attempt, as is not infrequently the case, to fatten any breed of the non-sitting type would be quite abortive.

The first consideration, therefore, is to secure the right breed—that is, one that will repay for the extra care and expense lavished upon its preparation. As must be readily admitted by all those who have practically tested the speed at which they reach the highest state of perfection, Dorkings, either pure or crossed, have no compeers. Sussex, Faverolles, White and Buff Orpingtons, are second best, and any other of the general purpose breeds follow closely up. Of course, it is well known that at the present time it is altogether too late to select birds for breeding table-chickens to supply the Christmas demand. But I refer to those who have several existing breeds, and from the latter is to be made the selection for fattening. If none of the purely table breeds are kept, then one of the before-mentioned general purpose chickens should be chosen. By now they will have grown a large frame and present a fairly good appearance, but when taken in hand the size is found to be somewhat deceptive, chiefly consisting of feathers. However, if the frame is there, the basis is laid for a very presentable table-chicken. Supposing that the owner has determined, from the time that the chickens were hatched, that he intends them for

table purposes, he will, provided that he understands the work, have so managed his stock, as to feeding, &c., as to have got a fairly good chicken so far as size is concerned; but he often fails, after reaching this stage, to obtain the greatest amount of success, because his final preparation is at fault, or perhaps it would be more correct to say there has been no thought of the finishing off. Suppose, therefore, that he has the right breed at his command—and by the present month it ought to be well grown—they may have had the run of the stubbles



READY FOR MARKET.

[Copyright.]

or other places conducive to their well-being, so that up till now they have enjoyed all the advantages possible. But they must not be allowed to enjoy this unlimited freedom much longer; rather they should be under more rigid control, preparatory for the Christmas consumption. These remarks are intended for the general farmer, and not for the professional fatterer, who, by means of cramming, has a regular routine which his fowls at all times of the year undergo. Instead of waiting until the eve of the Christmas markets, when the birds are hurriedly killed, plucked, and dispatched, they should undergo a system of preparation; this, perhaps, entails a little more trouble, but the enhanced prices will give ample compensation.

One of the chief points to be observed in the fattening of chickens is that they must be penned up. However suitable the food may be, were the birds to run about the yard during the fattening period improvement would not be nearly so marked as were they deprived of their liberty. When birds are penned in the ordinary fattening-cages, which are about 15 inches square, no exercise is possible; so that at the end of ten days or a fortnight the imprisoned fowls refuse their food, and were they killed in this half-finished condition very little improvement would be apparent. If, however, the birds are penned so that they may have the limited freedom of a small run—say, six feet long by three feet wide—this will keep the appetite going for another ten days or a fortnight, and at the end of this time the increase in weight and the improvement in quality are very satisfactory—provided, of course, that the birds are of the right breeds to bear the tedium of restriction. The food, from the time that the birds are penned, must be of a fattening nature, and it will be found that there is nothing to equal ground oats mixed with skim milk. In the absence of ground oats, barley-meal, buck-

wheat-meal, and middlings will answer the purpose. During the last six or seven days about half an ounce of fat per bird per day helps to soften the flesh and puts on the finish that is so necessary in the best quality of table-chickens.

Excellent results are achieved by what is known as hand-cramming. The birds are penned, as are those intended for the cramming machine, and when the appetite fails, they are stuffed with meal made into a stiff paste, and formed into pellets, about an inch long and half an inch in diameter. The birds are firmly held between the knees of the operator, with the neck elongated; the pellets are then put into the mouth and gently worked down from the outside into the crop. They are fed in this manner twice a day, morning and evening, the whole process lasting three weeks—that is, for one fortnight they are fed from troughs placed in front of their fattening-cages, and for the remaining week by hand. This plan is frequently adopted when only a limited number of birds are turned out, since the process is much too slow for the man who has large numbers of birds to handle.

Birds that have been fattened should never be sent to market alive. When they are so dispatched, they lose considerably in condition. They should be starved for twenty-four hours before killing; the intestines are thus empty, which not only makes the work of dressing and trussing a much pleasanter task, but, what is of still greater importance, the fowl will keep fresh longer. The plucking should be carefully done, without tearing the skin, and this is much easier of accomplishment if the birds are plucked immediately the neck is dislocated and the body still warm. They should then be allowed to get thoroughly cold and set before packing. If packed when warm, the flesh has a "flabbiness" which detracts considerably both from the quality and appearance. It must be remembered that to obtain the best prices, all poultry produce, not only at Christmas, but at all times, must be placed before the consumer in such a manner that it appeals to the connoisseur.

### Irish Statistics.

The General Abstract of Returns of Live-Stock, issued by the Irish Department of Agriculture for 1910, records that the number of poultry returned in that year amounted to 24,339,015, as compared with 24,104,934 in 1909, showing an increase of 234,081. Increases of 37,723 turkeys and 341,748 fowls are recorded, but decreases of 45,744 geese and 99,646 ducks. The analysis shows that the hatching season must have been a bad one in Ireland, for there was a decrease in birds hatched in 1910 to the extent of 99,987, and advance was entirely in old stock—334,068. In Leinster the number returned is 4,942,195, in Munster 5,662,930, in Ulster 9,259,944, and in Connaught 4,473,946. There is an increase of 244,488 in Ulster and of 64,977 in Connaught, and a decrease of 25,239 in Leinster and of 50,145 in Munster.

## SOME CLAIMS OF ORNAMENTAL POULTRY.

By WILFRID H. G. EWART.

ONE is so used to reading and writing about poultry in its purely economic aspect that one is apt to forget a most interesting and attractive feature of it. One is liable to ignore the realm of feathers, their peculiar beauty, the purpose and value of this beauty and how it may be turned to account. Years ago—half a century ago, perhaps—all this was far more highly considered, and the main purpose of a "poultry-yard" was to add to the elegance of an estate. People kept the most elaborate creatures in the most elaborate pens; fed them rather badly, no doubt—but it all looked very well. The Polish fowl is typical of that taste, and the Cochins of another similar taste for odd, quaint things. Of course, these idiosyncrasies were indulged in by the rich only, while the poor kept Dorkings, Sussex, Old English Game, and other breeds.

To-day we have to deal with another fashion and very different ideas. I would not go so far as to describe this as an essentially practical age, because there never was such a time for frippery, unnecessary decoration, and all manner of notions expressed in the most unpractical ways. But that is kept decidedly on one side, when we have to deal with poultry-keeping not as a hobby but as an industry. The ornamental aspect of it has disappeared save in one minor respect: the Fancy. Here again, however, we have a purely commercial affair finding vent in strenuous competition, and what I would point out is that we see to-day very little poultry-keeping in a strictly ornamental sense.

Last year I had the opportunity of viewing the poultry-yards of Miss Alice de Rothschild at Waddesdon Manor, Bucks, and it seemed to me that a great deal more might be done in the way of ornamental poultry-keeping on a scale initiated there.

Something, certainly, has been done, though upon the quaint, old-fashioned lines already indicated. Here are acres of Italian garden, rose-gardens, wonderful stretches of turf, shaded by cedars and magnificent old yew—all maintained in the neatest manner by sixty or seventy gardeners. The poultry rank simply as a factor in this grand scheme, and their immediate surroundings are necessarily of an elaborate description. Their purpose is to be ornamental.

The runs, of which there are about a dozen, ranged in a row, measure approximately thirty feet by twenty, and in each is quartered a different breed. An iron trellis-work palisade, painted grass-green, and about twelve feet high, encloses them, a gate being at the end of every run; upon the gates are tablets with the name of the particular breed inscribed. The same green trellis-work stretches over the runs so that the birds cannot escape or find their way into neighbouring pens. Whether or not the fowls so enclosed enjoy their existence cannot be said with certainty, but, despite other splendid arrangements for their pleasure and comfort, they commonly appear somewhat bored. Every run has its neat lawn constantly trimmed and swept and mown, and around this winds a gravel path from which the hens are expected to extract a necessary quantity of grit. In addition, these comfortable

creatures have a clean round pond with concrete sides and bottom, into which the rain descends and from which they drink. Their house is of the Swiss chalet type—very handsome indeed and quite in keeping with the rest of it. Various breeds are kept, each represented by six or seven hens and a cock. One finds White and Black Rose-comb Bantams, White Peafowl, White-crested Black Polish, Silkies, Silver Dorkings, and Buff Orpingtons, well enough in their way, but not sufficiently high-class for their surroundings. Old, and of a mediocre quality, they rather take the gilt off a remarkable effect.

The old-fashioned "yard" with its lawn, gravel path, and pond, is very well, but it seems to me the nature and appearance of its occupants are chiefly important. And, with regard to that, how few really ornamental breeds one can name nowadays! By an ornamental breed I mean the elegant Polish or the extraordinary Silkie or some other fowl of this moderately useful type. Our Fancy products, champions and prize-winners, are supposed to fill the rôle, no doubt, but often they are far too eccentric for the purpose. You cannot describe the Modern Langshan or even the Modern Leghorn as likely to add perceptibly to the beauty of a well-ordered garden—I fear they might detract from it. Neither can you regard the Buff Orpington—or any other Buff variety—in an ornamental light. Its individuals seem too varied in colouring, too "home-made" as regards general appearance. A flock of good Barred Plymouth Rocks is admirable collectively, but when picked to pieces, you find an angular body and an awkward length of leg which is not quite graceful. All these judged from a purely æsthetic standpoint are spoilt either by the mere fact of their utility characteristics or by some idiosyncrasy of the Fancy.

Of course, it does not detract from their intrinsic value in the smallest degree—the most useful article was ever the least elegant. Of all our modern breeds, I am inclined to take the Wyandotte as possessing the most genuine ornamental characteristics. Take, for instance, the Partridge, as typical as any of the breed, with its fine dignity of shape, flowing feather, and brilliant colours; the hen, with her refined pencilling and soft, harmonious colour. White Wyandottes, too, on a green sunlit lawn provide a picture of supreme delicacy—snow-white plumage, brilliant face and comb, bright yellow legs. Again, nothing in the feathered creation could surpass that modern production the Silver-pencilled Wyandotte, so long as the colour is good and the pencilling fair. Such as these, it appears to me, demand some further recognition than mere stress of competition or entries at a show give them. As beautiful things they should be kept for the sake of their beauty—they should be appreciated and admired in appropriate surroundings.

Perhaps time will bring a just appreciation of the domestic fowl's æsthetic qualities, but until that time comes I shall not believe the poultry fancier's work and accomplishments have been estimated at their true worth. Fashion is fickle in all truth, and it is conceivable that a season of riotous prosperity may be in store for the poultry Fancy. What is so particularly wanted at the present juncture is money and a moneyed class. We want to see the fancier's handiwork upon great places and estates about the countryside seriously cultivated and maintained at a high pitch of perfection.

# THE SOUTHERN LAYING COMPETITION.



A BIRD'S-EYE  
VIEW OF PART OF  
THE U.P.C.  
FOUR MONTHS'  
COMPETITION  
AT  
GRIMLEY  
POULTRY FARM-  
WORCESTER.

MAIN ROADWAY,  
SHOWING  
TWENTY-SIX  
PENS,  
OR TWO-THIRDS  
OF  
THE GROUND.



# THE NORTHERN LAYING COMPETITION.

GENERAL VIEW  
OF  
THE U.P.C.  
FOUR MONTHS'  
LAYING  
COMPETITION  
AT  
BARTLE,  
Nr. PRESTON.



THE TYPE OF  
HOUSE  
USED IN THE  
NORTHERN  
COMPETITION.

Each house is 12ft  
by 8ft., divided into  
two compartments,  
each accommodating  
8 birds.

Mr. Barron, the  
Manager, is standing  
on the left.

## FANCIERS AND FANCY MATTERS.

By WILLIAM W. BROOMHEAD.

*Wyandotte Bantams—The Poultry Club—The Dairy Show—Specialist Club Shows—To Protect Fanciers!—The Blues!—The Rosecomb Rock—Novelties—The "Royal" Show—November Shows.*

## WYANDOTTE BANTAMS.

Readers of the RECORD who are interested in Wyandotte Bantams should note that, owing to the failing health of Mr. Tom R. Grant, Mr. Albert Birtwisle (of 86, Chester Road, Northwich) has taken over the secretaryship of the United Wyandotte Bantam Club. Mr. Birtwisle is busy making the necessary arrangements for the club show, and hints that the committee should take up the matter promptly and help him to carry it out satisfactorily. He also appeals to members for subscriptions, and says the club will be glad to add to its numbers. There is much hard work in connection with the running of a specialist club, and to carry it on in a business-like manner means that the officers should pull together.

## THE POULTRY CLUB.

The result of the recent election is that Mr. Harry Wallis has been returned at the top of the poll for President with 442 votes—a record return for this or any other office. The successful Vice-Presidents are as follows: Section 1—Messrs. J. Wilkinson, 274 votes; O. F. Bates, 266; and R. Watson, 143. Section 2—Messrs. J. S. Hicks, 210 votes; R. R. Allen, 200; and F. Bloomer, 169. Section 3—Messrs. W. J. Golding, 363 votes; P. H. Baylis, 314; and William Rice, 224. Section 4—Messrs. F. J. Broomhead, 432 votes (the highest number ever recorded for this office); W. M. Bell, 418; and T. Threlford, 395. Wales—Rev. Lewis Jones, 302. Scotland—Mr. D. Reid, unopposed. The annual general meeting was held at the Dairy Show, and the "judge must be a member" rule, which has had some ups and downs since it was passed at last year's general meeting, was passed by a large majority, and is likely to become an established fact. Some discussion took place as to whether the office of solicitor should be an honorary one or not, but it was finally decided that it be an honorary office as heretofore.

## THE DAIRY SHOW.

In another column I have dealt briefly with the exhibits at the recent Dairy Show. There can be no doubt that it was a most successful and enjoyable affair; and, taken as a whole, the management was well carried out. I did hear that a Wyandotte was not penned in time for judging, and that the empty pen was not discovered until the owner appeared on the scene. There was trouble, naturally enough, but it was, I believe, the only slip, and considering the number of entries it was, perhaps, pardonable. There were no sensational prices realised at the auction sales, although a few birds in the selling classes (forty shillings limit) went at much higher figures than those printed in the catalogue. I did hear that a Buff Orpington pullet which was awarded "highly commended" was claimed by telegram at the catalogue price, £100, although I was unable to discover the name of the plucky purchaser.

## SPECIALIST CLUB SHOWS.

Although twenty-one clubs will hold their annual "outings" at Sheffield in December (the Partridge, Columbian, Gold- and Silver-laced Wyandotte, White Orpington, Plymouth Rock, and Orpington Duck Clubs have been added to the list since my last notes on the Combined Specialist Club Show), there will be a good meet at the Crystal Palace this month. The clubs holding their shows at the Sydenham fixture are the Dorking, the Brahma, the Croad Langshan (a Croad Langshan Club Show is announced to take place at Weston-super-Mare, with Mr. Mullens, who is down to judge the event at the Palace, officiating as judge), the Variety Orpington, the United Wyandotte, the Leghorn, Plymouth Rock and Andalusian, the Houdan, the White La Bresse, the Campine, the Black Sumatra Game Fowl, the Yokohama, the Silkie, the Sebright, Yokohama, Brahma, Hamburg, and Rosecomb Bantams, the Crested Duck, and the Waterfowl. Other specialist clubs are holding their shows at different centres.

## TO PROTECT FANCIERS!

An effort is being made to form a Fanciers' Protection Association, "to protect and further the interests of the fancier generally." How far the fancier needs protection may not be patent to some of us, but it appears that the sole object is to obtain certain concessions from the various railway companies, chiefly, apparently, in the matter of fares to and from the shows. That something should be done in the matter goes without saying, since the railway fares of those of us who attend many shows in the course of twelve months amount to a goodly figure. But, without wishing to dash cold water on the scheme, I am afraid that it will be a hopeless task. On many occasions the railway companies have been approached (*via* the Clearing House) by different influential bodies in the interests of the Fancy, and always without avail. However, there is nothing like trying, and if the Fancy on this occasion will rally around Mr. C. Watson, of Oxhey, Watford, some good may result.

## THE BLUES!

This is not a note on a common malady! Blue is now a very fashionable colour among poultry, and although I have not yet seen a Blue goose, fowls, ducks, and turkeys of that colour have come under my observation; and during a recent tour in the North I saw different breeds which could well be described as blue. Some of the best, in fact, are at the Bolton Model Poultry Farm, Westhoughton, Lancashire, where, too, is a pair of Blue turkeys. I have had inquiries lately as to how these blue varieties of fowls are manufactured. Many theories have been advanced as to how they can be produced, but not a few are theories only. However, some information on the subject has been made public, and this may prove of service to those readers of the RECORD who are endeavouring to breed blues. In a pamphlet I recently received from Mr. Arthur C. Gilbert, of the Swanley Poultry Farm, Wilmington, Kent, this well-known fancier says that his first Blue Orpingtons were obtained when he was producing the Cuckoo. Black cocks were mated with White hens, and from this union the cockerels and pullets were mated with Spangled Orpingtons. Among the chickens thus bred were

one or two Blue cockerels and two or three Blue pullets. The Blue cockerels were put with some cross-bred White pullets and Black Orpington pullets, and a Black cock was mated with the Blue pullets, the result being about two-thirds Blue chickens from both sides. I think that most fanciers of Blues desire a whole colour; but the matings mentioned by Mr. Gilbert are likely to produce blue-laced fowls, since the standard he sets up for the variety is as follows: Plumage of cock—neck, hackles, back, wing-bow, and tail dark slate-blue, and remainder of plumage medium slate-blue, each feather to show lacing of the darker shade as on the back; and of the hen—medium slate-blue, laced with a darker shade all through, except the head and neck, which should be a dark slate-blue.

#### THE ROSECOMB ROCK.

A friend writes: "I was in the smoking-room of a certain hotel the other evening when one of the local men asked if those in the know could tell him the meaning of certain different phrases. After several had been satisfactorily disposed of, he propounded the following: 'What is an ornithological inexactitude?' As no one seemed able to answer, I suggested, amid loud applause, 'Rosecomb Rock'." I do not claim to be the originator of this yarn.

#### NOVELTIES.

With a multitude of shows some secretaries are evidently at their wits' ends to secure a good entry. In a schedule of a recent event appeared the following: "All letters marked 'Entries' on the outside of the envelopes will be kept and opened on ———, at nine o'clock a.m., and entry-fees in same will be returned to the senders of the first three opened." Who were the winners and what was the result of this novel inducement remains to be seen. At another show, in the same county, I see that "Tea will be supplied gratis from 3.30 to 5 p.m." Maybe there will be a rush for the free drinks; but the fact that "Entry-fees (2s. each) will be pooled, and after deducting penning expenses the balance will be proportionately divided in prize-money," is not likely to result in a good entry.

#### THE "ROYAL" SHOW.

I have it on good authority that the poultry section of the "Royal" Show—which event is announced to take place at Norwich from Monday, June 26, to Friday, June 30, 1911—will not be held under Poultry Club Rules.

#### NOVEMBER SHOWS.

Up to the time of going to press with the present issue some sixty shows are announced to be held this month. The first of importance will be the Fifth Great Specialist Show at Kendal on the 2nd and 3rd. This is an exhibition of Game, Game Bantams, and Variety Bantams, the last-named section being put on for the first time. It should be a great event, since the prize-money is generous and there is a long list of specials, including many valuable cups. On the same days there will be an important fixture at Chester, while during the following week shows are announced to be held at Barnstaple, on the 8th and 9th; Gloucester, on the 10th; Carlisle, the same day, and Morecambe, on the 11th. The Grand International at the Crystal

Palace will take place on the 15th, 16th, and 17th, and this will overlap Cardiff on the 16th and 17th and Horsham on the 17th—both big shows. On the 22nd and 23rd there will be an Exhibition at Woking, and Viscount Tredegar's Show will be held at Newport (Mon.) on the same days. The Ladies' Poultry Club will hold a Show at Reading on the 23rd, while on the 24th there will be an exhibition at Chippenham and another at Theydon Bois; and both will clash with the Minorca Club Show at Highbridge, Somerset, on the 24th and 25th. Birmingham opens on the 26th, and during the following week there will be Ulverstone, on the 29th; Tonbridge, 29th and 30th; Cleator Moor, 30th; and Redhill, Portsmouth, and Dublin (the Irish Bantam Club Show), on the 30th and December 1. It promises to be a busy month.

## SOME CAUSES OF INFERTILITY.

By FRED. W. PARTON.

IT may appear somewhat early to speak on a subject that is felt most acutely in the breeding season, when complaints come regularly to hand, and the causes are discussed. It is, however, an appropriate time to try and prevent some of the prevailing causes. Probably one of the most common is inattention during the winter months in the care of those destined to be future breeders. By now the majority of the most likely pullets that are intended for use next spring will have been selected, and, if the males have not been actually secured, the source whence they are to come will be known and an eye kept upon intended purchases. This is done by those who grasp the importance of being in sufficient time. But there are many poultry-keepers who are prone to procrastinate in their selection of pullets and the purchase of males until too late. Thus the number of cockerels from which to choose is considerably lessened, since the more providential section of buyers have already had their pick, probably two or three months in advance, and they have very naturally selected those that were hatched early in the year, and are consequently well matured and have the needed stamina for stock purposes early in the following season. I do not deny that the man who buys his cockerels in January or February may get, to all appearances, an excellent type of bird, but it is very difficult even to the most experienced to detect just when he was hatched. He may have been hatched in May or even June, and a month or two in this respect is a most important factor in determining the question of fertility. Breeding from immature stock is doubtless responsible to a very great extent for a large proportion of the infertile eggs of which complaints are annually made. To guard against this cause is within the reach of every poultry-keeper. Without delay take steps to secure male birds, since at the present time it is an easy matter to foretell their age pretty accurately. Once having selected the males, they should be kept under good healthy conditions, with plenty of exercise; they must, however, be so far under control that they cannot approach the hens.

The hens should undergo the same rigid attention, and selection should be made of those intended

for stock purposes before they commence to lay; if conditions will allow of their removal from the general flock, it will be a distinct advantage. While one should aim at having the general flock laying by the beginning of November, no attempt should be made to force the selected breeders. It is invariably found that those pullets which have steadily and consistently laid throughout the winter are not in the same condition for breeding in the spring as are those whose strength and vitality have been reserved for the specific purpose for which they are intended. To place them on the stubbles, and then, as a further change, on to ploughed land, will be conducive not only to fertility, but to the securing of strong germs and robust chickens. Neither of the sexes should, however, be unduly exposed during a severe winter, but rather should they be brought near to the homestead for warmth and shelter. It is necessary, although seldom recognised, that hens should have their strength preserved for the breeding-time, since they are liable to exhaustion equally with the male. A further advantage in securing the male bird several months before his services are required is that he becomes accustomed to his changed conditions, and gets acclimatised. This is much easier of accomplishment before than after mating, and there is considerably less danger of the male going wrong, which not infrequently happens, within a week or ten days, when he is brought from a distance and introduced directly into the breeding-pen. Sometimes his weakness is not sufficiently apparent to warrant his removal, but the periodical testing of the eggs from the hens under his control will reveal his incapacity for the work of fertilisation. The time of year when the birds are mated must depend entirely upon the object that the owner has in view. But whether he be fancier, or a specialist in early marketing, or the ordinary poultry-keeper who does nothing out of the usual routine, it is equally important for him to mate in sufficient time for the pullets to grow accustomed to the companionship of a male, and to know whether the birds harmonise, as a change, or maybe several, will be necessary before the mating is quite correct.

Inbreeding is doubtless also a cause of sterility—that is, mating birds that are themselves the product of closely-related parents. A weakness is usually found in some direction, which may take the form of barren eggs. Whether inbreeding is prejudicial depends upon the experience of the owner. A fancier, to retain or confirm a certain characteristic, may inbreed; in fact, frequently it is absolutely necessary that he should do so to secure his desired end. But it must be remembered that he can inbreed with a much greater degree of safety than can he who does not understand the question of consanguinity—how far it may go, and what the relationship may be, so that injury to the chickens will not ensue. I refer principally to the farmer and other classes of poultry-keepers, who give small attention to these matters, and who, without the least compunction, indiscriminately inbreed for generation after generation, then complain of the sterility of their eggs and the delicacy of the chickens they do succeed in getting. Selection of good, healthy parents, fully matured, strong, and not inbred, together with the conservation of the breeding powers of both sexes until the proper time arrives, will go far to ensure fertility.

## NOTES FROM ABROAD.

### The Geline Fowl.

A correspondent writes that at a recent agricultural show in the Touraine, France, there were exhibited a number of specimens of "le poule Commune de Touraine," the name of which is Geline. These are medium-sized fowls, black in plumage with very bright red combs. They are very hardy, prolific and early layers, with delicate flesh. We had not heard of this breed previously, and it is probably a variation from some of the other black races which abound in Western France.

### M. Paul Monseu.

We note with pleasure that M. Paul Monseu, the distinguished Belgium poultry breeder and judge, has been accorded by the President of the French Republic the decoration of Officer of the Order of Mérite Agricole.

### Poisoned Turkeys in Australia.

With a view to the extermination of rabbits, which are a veritable pest in some districts of Australia, landowners are compelled by law to spread poison for their destruction. The results are, however, disastrous in other directions. Says the *Australian Hen*:

Turkey-raising, which formed a feature—and a profitable feature—of many of our Western holdings, has become, in many districts, impossible, for the simple reason that the turkey must have range, and when it ranges it picks up poison baits, and ranges no further.

### Poultry Experiment Farm in South Australia.

The S. A. Journal of Agriculture announces the establishment of a Poultry Experiment Farm, and states that the Hon. J. P. Wilson, M.L.C., Minister of Agriculture, and Mr. D. F. Laurie, Poultry Expert to the Colony, visited Murray Bridge with the object of selecting a suitable site. The object of the farm will be to breed stock for commercial purposes, and to educate the people in the district in the direction of producing better poultry and a standard egg.

### Death of M. Jules Léger.

The death is recorded of M. Jules Léger, of Audenarde, an energetic member of the Belgium National Federation of Poultry Societies, who had done much good work in connection with the central organisation and the development of poultry-breeding in West Flanders.

### Russian Poultry-Breeding.

The following notes are taken from the report by Mr. Consul H. M. Greve, of Moscow, on the trade of Russia and of the Consular District of Moscow (Cd. 4,962) for 1909:

The many advantages of poultry farming were even more clearly indicated in 1909. It is calculated that the export of game and poultry increased by about 50 per cent. or even more, and that of geese by about 75 per cent. As the prices obtained for grain in many districts were low, it was recognised by the peasants that it was more profitable to keep it for feeding poultry than to sell it.

The export of eggs was 2,845,000,000 (in 1909) as against 2,589,000,000 for the preceding year, and they sold for £6,548,000 as against £5,780,000.

The export of eggs and poultry for 1909 were :

	Total Export. £	To Germany. £	To United Kingdom. £
Eggs ... ..	6,548,000	1,757,000	2,723,000
Live Geese ...	651,000	628,000	550
Live Poultry ...	139,000	138,000	—
Dead Poultry ...	488,000	155,000	291,000

Totals... £7,826,000 £2,678,000 £3,014,550

### South Australian Poultry Conference.

The official report of the First Colonial Poultry Conference, held at Adelaide, April 18 to 22, 1910, has been issued, and contains a large amount of

### Poultry-Houses at the Breeding Centre of Mrs. Wagner, Helbrup, Denmark.

Especially in Denmark, where in autumn they get much rain and cold weather, and sometimes a lot of snow in winter, it is of special value that the poultry-houses are furnished with a large, light, well-ventilated scratching-shed, where the fowls in the short days of the year can get their corn-feeding in plenty of straw, and in this manner work for their food.

The illustration is taken from a breeding centre for Plymouth Rocks and Wyandottes belonging to Mrs. Wagner, Helbrup, Denmark, and shows a model for poultry-houses very commonly met with in this country. The poultry-house is built in two



THE POULTRY-HOUSES OF MRS. WAGNER, HELBRUP, DENMARK.

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useful information. The opening meeting was presided over by the Minister of Agriculture, who gave a most encouraging address. Papers were read by Major Norton, D.S.O., Trade Commissioner to Europe, on "Oversea Markets for Eggs and Poultry"; by Mr. A. H. Padman on "Feeding and Rearing Chickens"; Mr. D. F. Laurie on "The Structure of the Egg"; Mr. A. E. Kinnear and Mr. G. von Bertouch on "Egg Circles"; Mr. V. Kappler on "Feeding of Table-Poultry"; Mr. D. F. Laurie on "Scientific Breeding"; Mr. F. C. Lampe on "The Single-Combed Black Orpington"; Mr. W. R. Day on "Feeding and Housing for Egg-Production"; Mr. C. F. McCann on "Cold Storage of Eggs"; Mr. T. B. Brooks on "White Leghorns"; Mr. D. F. Laurie on "Diseases and Incubation"; and Mr. A. E. Kinnear on "Effect of Egg-Laying Competitions."

floors—namely, the sleeping-room and the scratching-room. The sleeping-room is raised nearly thirty-six inches from the floor (the earth), and in this manner a scratching-shed is formed under the sleeping-room, and, furthermore, another scratching-shed is built in front of the foreside of the poultry-house. In bad weather the hens can go from the sleeping-room through a little entrance whereto is placed a little ladder, directly out into the scratching shed, where the nests are placed. At the eastern side of the scratching-shed and in the sleeping-room is a door for the poultryman through which he can come into the house. To the sleeping-room leads a thirty-six inches high ladder. In the roof of the sleeping-room is placed a ventilating shaft, and in the south part of the sleeping-room and scratching-shed are windows, as shown in the illustration.

## POULTRY-KEEPING IN FINLAND.

By THE EDITOR.

THE average Englishman thinks of Finland as a barren and partly uncivilised country, where wild beasts abound and where intense cold prevails the whole year round. As a matter of fact, very little distinction seems to be made between Finland and Lapland, and while it is true these two countries are one politically, they are almost as unlike one another as the North of Canada and the United States. There are, of course, large parts of Finland which are nearly, if not quite, uninhabited, but this is owing to the fact that huge forests abound,



A TYPICAL FINNISH FARMHOUSE.

while the soil is comparatively valueless; it is not because it is ice-bound the whole year round. It must be remembered in this connection that while Finland is a large country, it has a population of only three millions, and thus it is obvious that there must be huge tracts of land which are comparatively unpopulated. The towns of Finland are, generally speaking, quite small, and it is worthy of notice that only one-seventh of the entire population live in the towns, the great majority of the people being engaged in widely scattered farms or in the vast forests of the North. While the rural districts contain about eighty-five per cent. of the population, Finland possesses some very fine cities, where every modern convenience exists in much greater profusion than in England. Helsingfors—the capital—Abo, Tammersfors, and Uleaborg are all large and thriving cities, containing some exceptionally fine buildings, and comparing very favourably indeed with towns of a similar size at home. Helsingfors, with its population of 150,000, which has increased by nearly fifty per cent. during the last ten years, is magnificently situated on the Baltic, and possesses a university with over two thousand students.

The great industry of Finland is the timber trade, and several of the large towns, principally those in the North, rely almost entirely upon this business. The trees are felled during the winter

months, and are dragged over the hard snow to the rivers and lakes. As soon as spring approaches and the snows melt, they are floated down in enormous quantities to the coast, there to be cut up and exported to foreign countries. The value of the timber trade to Finland is very great indeed, and during 1909 there was exported wood to the value of nearly £7,250,000.

The winters in Finland are long and severe, extending from about the beginning of October to the end of April. This is, of course, not surprising when it is remembered that part of Finland is within the Arctic Circle. As a matter of fact, there is really only three months of summer, and during this time practically all the farm work has to be done. Fortunately the summers are very hot, and the crops grow quickly, otherwise many regions of the country would be uninhabitable. During the winter months all the lakes (Finland has over a thousand lakes, varying from a few to several thousand acres in extent) and rivers and most of the seaports are ice-bound. One or two of the larger ports are kept open by means of ice-breakers—large vessels which are specially constructed to enable them to plough their way through ice of any thickness—but the process is a costly one, and cannot be adopted universally. Wheat is scarcely grown at all, since the summer is insufficiently long to ripen it properly, but oats and rye thrive well, and these form the chief crops. The grain is sown about August and is harvested the following July, and while the yield per acre is not so high as in many other countries, it is satisfactory considering the fact that the season is so short and that the methods of cultivation are somewhat old-fashioned. A very curious system of hay-making is in vogue, and we do not remember to have seen it elsewhere. The grass when cut is hung upon strands of wire stretched three or four feet above the ground, or else upon poles fixed in a similar manner, where it remains until it is dry,



SOME OF FINLAND'S YOUNG POULTRY TENDERS.

when it is carted to small hay-sheds and stored till winter.

To the poultry-keeper Finland offers very few points of interest, especially in the North, where hardly any fowls whatever are seen. In the South they are rather more numerous, although nowhere are they to be met with in large numbers. In

travelling from Kajana to Uleaborg, a distance of about seventy miles, we saw only one flock of fowls, consisting of about twenty of the veriest mongrels we have ever seen. During the journey we must have passed some hundreds of small farms, but nowhere, with the one exception we have mentioned, was poultry included in the farm stock. The reasons for this lack of interest in poultry-keeping are, first, the severity of the winters, to which we have already referred, and, secondly, the great distances between the holdings, together with the want of communication. Although the telephone is to be found in seventy-five per cent. of the farmhouses, even in those in the most remote and inaccessible parts, the roads are bad; at times they are well-nigh impassable; while the railways are few and far between. For at least six or seven months of the year it is necessary to keep the birds indoors, and this, of course, necessitates a considerable expense and trouble. The ground is covered with a thick layer, sometimes several feet in depth, of frozen snow, and to liberate the fowls at such times inevitably results in frozen combs and other mishaps. In the case of cattle—Finland is a great dairy country, and exports a large quantity of butter to England and other countries—the same thing happens, and the stock have to be confined in sheds from October to April, and sometimes May. We suggested to some of the farmers we met that the fowls might be kept in a corner of the cowshed, partitioned off, if needs be, where the warmth from the cows would assist very materially in maintaining the bodily temperature of the hens. While not appearing at all enthusiastic about the plan, one or two promised to give it a trial during the coming winter. The second difficulty regarding the disposal of the produce is, of course, a very serious one, but as the usual custom is to dispose of butter once a week, the eggs could be sent along with it to the nearest market town.

In the South some serious attempts have been made to keep poultry on a fairly extensive scale, but here again the severity of the winters has proved a rather serious obstacle to success. In the Board of Trade Returns Finland is credited with a considerable export of eggs, but the explanation of this is that the port at which produce leaves for England receives the credit, and practically all of the so-called Finnish eggs are of Russian origin. In the same way France receives the credit for a considerable supply of the Italian eggs which are imported into England. Far from exporting eggs, Finland has actually to import them in order to meet her own requirements and to supply the needs of her rapidly increasing population. It seems very strange indeed that a country consisting of such an overwhelming majority of people living in the rural districts should be unable to supply her own needs. But such is the case, and a considerable quantity of eggs are imported into Finland every season. So far as we were able to discover in an extended trip through Finland, there is no poultry-farm worth the name in the whole of the country. On some of the large farms, however, there are well-equipped poultry plants, while on many of the small holdings in the southern part of the country poultry are kept in limited numbers.

The type of fowl to be met with most frequently is the laying or non-sitting, and very few of any other class are to be seen. At one farm, it is true,

there was a large flock of Coucou de Malines, at another some three-quarter Dorkings, while at a third there were a few extremely good Buff Orpingtons; but, generally speaking, the Finnish fowl is a small-bodied, active bird, closely resembling the Leghorn, and particularly the White Leghorn, since nearly all have white plumage. Practically nothing at all is done in the way of fattening chickens for the table, and most of the specimens seen in the hotels and restaurants are of very poor quality indeed. We are sure that a great deal might be done in this direction, but at the same time it must be remembered that the long, cold winters render early rearing an extremely difficult matter.

Whatever natural beauties, and these are very



ONE OF THE CLIMATIC DIFFICULTIES AGAINST WHICH THE FINNISH POULTRY-KEEPER HAS TO CONTEND.

striking, and whatever natural wealth, and this is by no means insignificant, Finland may possess, it cannot by any stretch of imagination be called a suitable country for poultry, owing, as we have already pointed out, to the intense cold during the greater part of the year, and to the lack of efficient communication. It is difficult to see how these difficulties can be overcome, especially so far as the former is concerned. In the course of years, when the country is more thickly populated, when the railway system has been developed, and when the farms are not divided by such great distances, the second difficulty will be largely overcome, and in spite of the long and severe winters the poultry industry may become a very important branch of agriculture.

## THE POULTRY-KEEPER'S OTHER INTERESTS.

By "HOME COUNTIES."

*Author of "The Townsman's Farm," "Poultry Farming: Some Facts and Some Conclusions," "The Case for the Goat," "Country Cottages," &c.*

"Poultry should be only one part of the stock."

—Hon. Secretary of the N.P.O.S. in the "Cyclopædia of Modern Agriculture."

### THE CARE OF POULTRY MANURE.

When one has a large garden it is not only the eggs but the manure which the hens produce which is valuable. It is remarkable how much fertilising material poultry-houses will yield if pains be taken to preserve the droppings. The best thing to use to catch them is garden soil. One sometimes finds gardeners grudging them good top-spit stuff. As, however, it is all coming back to the garden again, I cannot see why they should. The reason why the top-spit soil should be used is that it is the part of the soil which is most tenanted by bacteria. When you go below the top spit there are fewer bacteria. A few feet down there are none at all.

### BACTERIA HELPERS.

These bacteria in the soil do not destroy the droppings. They merely act upon them in such a way that the soil is of more immediate use to the plants. The bacteria do their work so well that when one handles the soil there is no trace of droppings at all. The best way to use the soil is to put a fresh supply into the houses, say, twice a week, and to rake over the roosting-shed floor daily. There need be no hurry at all in emptying the shed. The soil need not be taken out for a year. The more there is the better the bacteria will do their work, and the more the hens will appreciate the convenience for dusting themselves. A board put along at the door will keep the soil from falling out.

### LITTER.

As ordinarily handled, poultry manure is wastefully applied to the garden. Particular patches get over-manured and other patches get no manure at all. As the manure is one of the richest available, it is a pity that it should be turned to anything but the most effective use. The scratching-shed part of the poultry-house can be supplied with soil as well as the roosting part, litter being placed on the top of the soil. In due course a considerable amount of droppings will work through the litter into the soil. The litter should be quite short, of course. Cavings are a splendid thing. But if they are not available a little straw may be used. Hay, of course, would never do. Later on you would be applying hay-seed as well as manure to your garden. But no great amount of litter is necessary if there is a good depth of soil below it. If you have never tried using soil in your poultry-houses you will have to thank me for some wonderful stuff for your garden. The old plan of scraping out the droppings and placing them in a barrel and then mixing them with soil before applying to a garden is nothing like so good as the

plan of letting the hens do the mixing. In the result you will have a fertiliser which, physically as well as chemically, cannot be beaten at the merchant's. If your soil is inclined to be heavy throw your ashes—after the cinders have been sieved out—into the poultry-house along with the soil.

### FEATHERS.

Among the snarks of paying poultry-farms that didn't pay that I have looked into was one on a very extensive scale indeed that was supposed to pay its rent, and I don't quite know what else out of its feathers. Of course, it did nothing of the sort. But when I have seen poultry-keepers in a smallish way sending to their customers birds and eggs and flowers and vegetables, it has occurred to me that there might be a little business to be done in feather pillows. The quantity of feathers on hand soon mounts up, and if not mixed altogether when put away can be dealt with with a minimum of labour in the winter. It is a tiresome business, feather-pulling, no doubt, but the quantity soon piles up. And there is a mass of feathers that can be used whole by way of supplementing the stuff picked from the quills of the larger sorts. A larger price could be asked for feathers if they were sold in neatly-made white cases, the buyers of which would only have a cover to make for them.

### PLANTS FOR SALE.

I am always sorry for new-comers to the country who launch out elaborately in trying to purvey flowers for gardens. The thing is so much done nowadays—*vide*, for example, the advertisements in the popular gardening papers and the ladies' journals—that there is not much money to be picked up. But a few flowers can often be sold to customers for poultry and eggs, and, however small the return, the cost of them is so little that there is a margin. One wallflower will yield enough seed for quite a large breadth of seedlings which can be planted out to make nice cobby plants. A few dahlias will also increase themselves wonderfully if well treated. As acceptable and profitable plants as any are likely to be are "herbs." Grown in the right soil, with the aspect they like, sage, lavender, mint, thyme, and so forth, grow rapidly, and the reproduction of them is exceedingly easy.

### THE PHOTOGRAPHER IN THE POULTRY-YARD.

I have spoken sometimes of photography for poultry-keepers. In spite of the thousands of poultry photographs that appear there are lots that could be taken that would be very interesting. For instance, I have never yet seen a set of photographs representing the eight weeks in an Aylesbury duckling's life. What could be a more interesting series? Except that the period between birth and full development is longer, the same thing could be done with a chicken. I should like to look at a series showing the transformation of the chickens from the neuter stage into pullets and cockerels respectively. In fact, there are any number of poultry pictures I want to see that never seem to appear in the poultry papers. The photographer has not yet begun to exhaust the "copy" possibilities of the poultry-yard.

### IN FRONT OF WIRE NETTING.

It goes to my heart this year to destroy the enormous number of raspberry suckers I have. So I am

having a strip of ground dug up just outside the wire netting of the poultry-runs, and I propose to plant them there. The canes will partly hide the netting, which is not an object of beauty, and I shall get some raspberries. Perhaps enterprising hens and cockerels will also; but there will be enough for us both.

#### LOGAN BERRIES.

The perfect thing to train up on wire netting, however, would be logan berries. They are simply a nuisance unless grown on a good support, and they would revel on stretches of six feet high wire netting. Needless to say, I am not proposing putting plants over the netting of small pens. They will only do on the netting of large ones, or the poultry will not get the sun they need. Scarlet runners are another excellent thing for poultry wire netting. Unless you have a good pair of leather gloves or are prepared to buy a pair, stick to scarlet runners. Logan berries are the prickliest things ever invented. Rasp canes are velvety in comparison.

#### SIMPLE FRUIT BOTTLING.

A correspondent, "An Amateur Poultry-Keeper," writes to me on the subject of bottling fruit as well as on the palatability of poultry past work:

"It may interest your readers to know," she says, "that an ancient hen may be very successfully cooked by boiling her for one hour, and then placing her in the oven to be roasted for another hour. It is wonderful how her years fall away from her under this treatment."

"Bottling fruits," my correspondent goes on, "is a most interesting occupation, but does not need so much paraphernalia as is generally believed. My method is to place the fruit, well dried, in clean dry bottles or jars for the purpose. These are placed in a slow oven till the fruit changes colour with the heat, and the longer time it takes the better. When the change has taken place the bottles are removed to a wooden table and each one is filled to overflowing with boiling water. The jars are immediately sealed or stoppered down—and that is all! Of course the fruit has to be stewed with sugar when used. I may say that I took first prize with this method at our local show last year in a class of ten competitors."

Obviously, it is absolutely necessary that the water should be boiling. Perhaps some readers will be nervous about cracking the bottles, but as they are already hot, there should be no accidents. I do not doubt that there are as many ways of bottling fruit as there are of composing tribal lays, and that every single one of them is right, provided it is based on the fact that the fruit must be sterilised and kept sterilised. My lady correspondent does the sterilisation, it will be seen, in two stages. The advantage of the plan of which I have had experience is that it is done at one stage. The oblong tin I happen to have, which almost fits the top of the kitchener, takes twenty-four bottles, which is more than can be got in an ordinary oven, and all that needs doing is to fill them with fruit, set them in the water with a little hay below, keep them from touching one another, and bring the heat up to 160 or so. Then apply the screw-down lids, leave in for, say, three-quarters of an hour to make quite sure, tighten the lids and take out the bottles, and the job is over.

## REVIEWS.

### A FAMOUS COCKER.

THE LIFE AND LETTERS OF JOHN HARRIS, THE CORNISH COCKER. By H. A. Privately printed. 1910. 77pp.

WITH the death of John Harris, of Liskeard, Cornwall, of whom a short biography was given in the POULTRY RECORD of April last (Vol. II., page 356), the old race of Cockers, who made the final history in Britain of fighting Game, may be said to have come to an end. Breeders and feeders, skilful in the extreme, their work was put to a test which practically no longer exists, in that their birds had not alone to be characterised by purity of race and type, but had to possess the supreme qualities of vigour and courage; otherwise they were useless. Apart from the ethics of cock-fighting as a sport, there can be no question that the fowls bred for this purpose were the perfection of their species. That much can be said without committing ourselves to a defence of the pastime. Yet it is true that there are other sports still sanctioned, such as shooting and fishing, in which the sufferings inflicted are as great as those imposed upon the Game-fowl, without the keen delight in which these birds entered upon the main.

It was fitting, therefore, that some account should be given of the life of one who was so closely connected for nearly seventy years with English Cocking, and in the hands of a close friend like Mr. Herbert Atkinson, himself an ardent Game-fowl-breeder, we had hoped for a work which would have been worthy of the subject. Such cannot, however, be claimed for what is but a brief sketch, lacking in that detail which many will still desire. Perhaps it is too early after John Harris's death to expect a complete biography, which this does not aspire to be. There must be a multitude of letters available, and these, with the voluminous writings in various papers and books from the pen of John Harris, should afford abundant material for a larger work, full of deeply interesting experience and observations. Such a book could not failed to command a wide circle of readers.

Mr. Atkinson has largely drawn from letters written to himself and a few of "Game Cock's" articles on various subjects, in which there are many points of interest to students of poultry. As an indication of the courage of the Game-fowl, it is told that "One killed the largest rat I ever saw the other day, 19½ inches long." It is stated that Cuckoo Game are called in Cornwall, Mackerels; in Devon, Speckles; in Wales, Cherches; in Yorkshire, Creols and Creels. Reference is made to spurs, of which Harris had a fine collection. Here are a few maxims worth remembering:

"Never sit eggs from a hen after she begins clucking, she is not then in perfect health."

"Breeding from old parents on both sides invariably breeds them out. One side or the other should be growing youth."

"To breed from birds that have suffered from roup even on one side is bad, from those that have had diphtheria is destruction."

The book is illustrated with a portrait of John Harris, which is excellent, a view of the old Truro Cockpit, and of the famous Gwenap Pit, in which John Wesley preached. But what are these among

the multitude available? We trust that there may yet be given more from the store of records to be found, and that this may be but a foretaste of a fuller history of John Harris and his times.

## A GERMAN POULTRY FARM.

By W. BROWN.

DIE RASSE—UND NUTZGEFLÜGELZUCHT IN SCHIFFMÜHLE.  
Bei Dr. A. Lavallo. Berlin: Fritz Pfenningstorff, 1Mk.

SITUATE amidst beautiful surroundings, in the neighbourhood of Freienwalde-on-the-Oder, is the farm of Dr. A. Lavallo. I have recently received an interesting description in book form giving particulars as to the equipment and stock, and from

The incubator-shed is well built, and as the walls are double thickness of stone the temperature within remains very constant. The ingoing air is made to pass under the roof and the floor, and the inlet is governed so that the ventilation can be regulated. There is capacity for 600 eggs in the machines used, and at the same time in an adjacent room during the breeding season 50 hens on the average are sitting on from 12 to 15 eggs apiece, making a total egg capacity of over 1,200. Dr. Lavallo has a method of his own in hatching. His plan is to place the eggs in the incubator for the first seven to nine days, until after he has tested them for fertility, then to continue the hatching period until the twentieth day under broody hens, finally bringing out the chickens in the machines. In this way he secures the advantages of both systems,



DR. A. LALLALLE'S BREEDING-PENS.

the information contained therein one realises that, although the industry of utility poultry-keeping does not appear to be progressing rapidly in Germany, as a whole, there are some up-to-date and skilful poultry-breeders in various parts of the country.

The land worked by Dr. Lavallo is of very good quality and light in texture, and the area is sufficient to allow him to grow a considerable portion of the food used by his birds. The lie of the land is such as enables him to give all the houses a southern or south-eastern aspect, and they are naturally sheltered from the north and east. The spot chosen is almost ideal, and there are very few poultry-keepers who are as fortunate. The farm is laid out with a view to minimising labour, and this is brought about by the arrangement of the houses. Commencing with the dwelling-house, it is possible to visit the incubator-house, brooder-house, then the special sheds for growing stock and the adult houses, with the greater part of the tour under cover.

and succeeds in producing the largest number of the strongest chickens.

Close to the incubator-shed and sitting-hen house there is a motor-room. The petrol motor is a 4.5-h.p. machine, and it is used for food grinding and crushing and the preparation of other feeding-stuffs. The stables, piggeries, and byres are in the same range of buildings. Efficient arrangements have been made for the water supply, and to guard against shortage in the summer there are a number of small reservoirs dotted about the farm.

The poultry-houses are all well-constructed, in that they are made of wood and specially thick roof paper. In all there are fifty-two houses and runs, and in the majority of the latter fruit-trees, such as plum and cherry, are planted, while others have natural trees growing in them. The houses themselves are fitted with a roosting-chamber and a large scratching-shed, the latter being open-fronted. Trap-nests, dust-baths, and feeding-troughs are used for all pens.

## CRAVEN OF MANCHESTER.

EVERY trade is associated in one's mind with one or two great names. Speak of shipbuilding, and the names of Swan, Hunter, Ltd., or Harland and Wolff, or Fairfield at once occur; engines recall the great firm of Vickers, Sons, and Maxim, and small arms that of Kynocks. Similarly when one speaks of one of the oldest of all industries, the basket-making trade, one associates it instinctively with the firm of T. Craven and Sons, of Manchester. This firm's reputation, however, does not rest solely on basket-making. They are also very large manufacturers of poultry appliances of every description and of foods and medicines for poultry and pigeons. Poultry-baskets of every conceivable size and shape, houses, coops, perches, pens, feeding-troughs, surgical instruments, and, in fact, everything known to the modern scientific poultry-keeper emanate from this establishment. They are the owners and makers of the famous Nevarc remedies for poultry and pigeons. Apart from made-up manufactures, the firm also do a large trade in wire netting, supplying this in all strengths and meshes to customers throughout the country.

supply nearly everything that is wanted at a moment's notice—one may gather that the amount of storage room required is very considerable. When the firm was founded nearly



sixty years ago their premises were situated in Marsden Court, Fennel Street; but the still-growing volume of business in recent years soon made it evident that more room

was necessary. The result was a move to their present works in Corporation Street. Here they possess two fine blocks of buildings, known respectively as Victoria Works and Long Mill Gate Works, each of them six storeys high, with a half-stone front. The lower basement of each is used for the manufacture of baskets and for willow sorting—it should be mentioned, by the way, that Messrs. Craven have their own willow plantations—and is so arranged as to reduce work and delay to the lowest possible point. The upper basement contains the fitting and finishing departments.

The business and private offices are on the ground floor. The upper storeys are mostly used as showrooms, and here, in multitudinous display, are set forth the piles of baskets, the specimens of the hundreds of appliances in which the firm deals.



Corner of  
General Basket Dep't

When one adds that a huge quantity of goods is always kept in stock—for Messrs. Craven pride themselves on being able to

## TRADE SUPPLEMENT

To particularise, Messrs. Craven make baskets in every conceivable size and pattern, including the well-known expanding partition poultry-basket introduced to the poultry world

manager. The Export Department is a vast department controlled by yet another of the family.

Messrs. T. Craven and Sons have a large department for the manufacturing of wire-work of all kinds—show-pens, wire runs and flights, wire hurdles, wire nests for poultry which are vermin-proof, pea trainers and garden arches, and a great assortment of other articles. Then they have a special department for tin-plate and metal-working, where you will find them manufacturing incubators, tanks, hoods, lamps, fountains, troughs, grit-boxes, chicken-troughs, and many other appliances for poultry, pigeons, and dogs. Caponising instruments and a vast assortment of nippers, special scissors and forceps, tooth-scrapers, &c., &c., the two latter being specially manufactured for dogs, are also made by the firm.

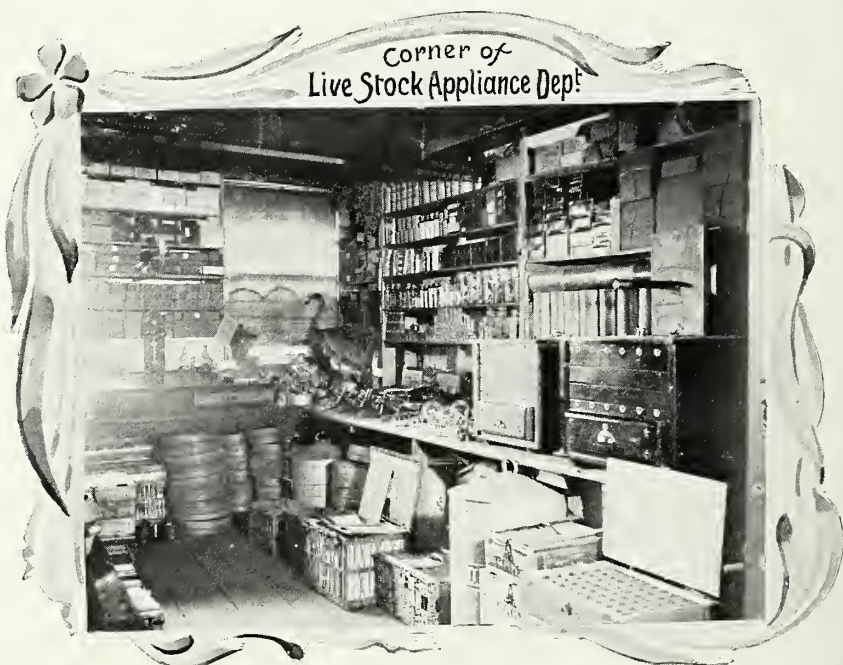


IN THE JOINERY SHED.

last October and exhibited at the Manchester and Crystal Palace Shows, with the result that in each case it secured first prize silver medal. These baskets are manufactured on a principle altogether different to others, the interior fittings being arranged so that almost any quantity of birds may be carried separately in the one basket by the simple alteration of the partition, thus overcoming the great difficulty which previously faced fanciers sending fowls to shows.

Apart from their basket manufacturing departments, they have also an up-to-date joinery works where they manufacture woodwork of every description, including incubators, poultry and pigeon houses, coops, foster-mothers, and rearers, brooders, trap-nests, dog-kennels, and many other articles which space will not permit us to give our readers details of. And here we would emphasise the fact that the proprietors are practical men themselves. Whilst one of them takes the office management, you will find another of them looking after the manufacturing departments and seeing that the goods are being turned out so that they will give satisfaction to the buyer and credit to their name. Another of the Mr. Cravens is the head buyer and advertising

Apart from their Victoria and Mill Gate Works, Messrs. Craven have a huge stores within the railway arches under Victoria Station. One of the arches is used for the stabling and the others for storing of



raw material and finished goods. Imagine walking through railway arches 2,238 feet long, packed solid with baskets, willows, canes, &c., &c., avenues of them, and then you will have an idea of what a Craven stock is, and what they are in the position to cope with.

## IMPROVING THE STOCK BIRDS. AN IMPORTANT POINT.

By BERNARD FINCH.

TO secure the highest degree of success from fowl-culture, there is perhaps no factor so important as keeping up the standard of quality in the stock birds. By quality is meant the special feature at which the poultry-keeper aims. If, for instance, egg-production be the particular point desired, it will be essential that only hens which have proved their superiority in this respect be retained for breeding purposes. It is not in the least necessary for the ordinary poultry-keeper to use trap-nests as a means of picking out his layers. By intelligent observation he can make a very accurate selection of the best birds for his purpose. When the fowls are run in moderately small flocks, as they always should be to obtain best results in egg-production, the attendant will speedily get to know each individual bird. He will keep a daily record of the number of eggs laid by each flock, and, by observing the habits and appearance of the different hens, will quickly be able to select those which are making the heaviest contribution to the egg-basket. There is an old saying, which has the novelty of being perfectly true, that "the lazy hen neither lays nor pays." The bird which shows activity only at feeding-time can be retired. She will develop fat to the detriment of her egg-producing capabilities. The busy hen, on the other hand, which spends the time between meals in actively scratching and foraging, will be found to be the bird which pays regular and frequent visits to the nest-box. She is the kind of bird to be retained for stock purposes.

By following this simple method of observing the habits of his fowls, the poultry-keeper will be able to pick out his best layers, so that when the breeding season opens he can make up a special pen of these for the purpose of producing chickens for his own future use. Youngsters bred from proved layers such as these may be relied upon to give a good account of themselves when their own turn to provide eggs comes round. It is necessary, of course, to distinguish these special chickens from the rest of the flock, so that the poultry-keeper can make no mistake when he selects the birds he intends to keep for his own stock. The only reliable way of doing this is by putting a distinguishing mark upon the chickens as they hatch. The cheapest method of so marking chickens is by the use of a toe-punch. With these little instruments, which are quite inexpensive and may be obtained from any dealer in poultry appliances, a small round hole can be punched in the thin web of the chicken's foot. The operation is quite painless and easily managed. Another method is by the use of leg-bands. These are made in rubber, metal, and celluloid, and are sold in all sizes, from the tiny ring, necessary for the newly-hatched chick, to the full-sized ring, for the adult fowl. When leg-bands are employed, a series of different sizes must be purchased, so that the rings may be changed to agree with the growth of the bird's leg.

In selecting fowls for the breeding-pen, special attention must be paid to the choice of a male bird. The male bird constitutes half the flock, and is thus a very important consideration. The poultry-keeper will, of course, retain for his own future use in the

breeding-pen the best cockerels bred from his flock of proved layers. He must be careful, however, not to mate these birds with blood relations or with pullets in their first season. The mating of cockerels with pullets, unless very early hatched and well matured, is attended with considerable risk. The progeny of such parents is usually delicate and weakly. First season cockerels should be mated with hens, and first season pullets with a cock in his second year.

When starting to build up a "laying strain," the poultry-keeper often finds the selection of a suitable male bird a difficult problem to solve. He has, perhaps, no knowledge of the pedigree of his own cock birds, in so far as laying qualities are concerned, and he finds it necessary, therefore, to purchase the males elsewhere. The introduction of new blood into the flock, if managed judiciously, is generally followed by an improvement in the quality of the stock, but it goes without saying that the imported birds must be carefully chosen. To improve the laying qualities of a flock, only birds that are bred from tested layers should be introduced. The price paid for a reliable cock bird of this description will naturally be higher than would be the case in buying an ordinary fowl, but the extra cost is well spent.

There is one other point regarding the introduction of new blood which must be emphasised. In purchasing, the poultry-keeper should endeavour to get his new birds from a locality which has conditions of weather and soil similar, as far as possible, to what is usual in his own district. He will then get the full benefit from the stock he buys. Best results cannot be expected from a bird which has been transported from a warm and relaxing atmosphere into a bleak and exposed position, and *vice versa*.

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## SOME FEEDING PROBLEMS.

*To the Editor of the ILLUSTRATED POULTRY RECORD.*

SIR,—I am interested in the articles on feeding in the RECORD. With the exception of lettuces, at which my pampered beauties turn up their noses, and malt-combs, I use all the ingredients mentioned in this month's list, though rice has quite fallen out of my menu since I stopped table-ducklings, and the goat's milk is either fresh or naturally soured, and have found practically the same results as indicated; but I would always give nettles and swedes a first place among vegetables, then Jerusalem artichokes. But there is one point that I should like to see made clearer; it is one that is nearly always missed in poultry works, yet to the poultry-keeper ignorant of the chemistry of foods and physiology, it is very important—namely, the discrimination between the carbohydrates. When I want to know about the feeding property of anything for fowls I always look, not for carbohydrates, but for the amount of *starch*. If a table does not give that I throw it aside as useless for poultry purposes. Further, the proportion of starch to other things contained in the article itself is also important. We usually dismiss potatoes as too starchy, yet they have but 18.8 per cent. of starch, whereas oatmeal, wheat, rice, and peas have three to four times as much starch. The carbohydrates of maize and pea-meal are practically the same, but how different the general effect of the two

foods! While the carbohydrates in molasses stand at a percentage that would be fatal if they happened to be starch—being sugar, they produce very different results, but how is the poor poultry innocent who merely reads “carbohydrates” to know the difference?

Will you allow me to enter a mild protest about barley-meal? Mr. Palmer refuses to allow barley in any form on his farm, as he has seen so much liver disease from it. I cannot get eggs without it owing to damp, but I honestly believe that it is its excessive use that makes old hens unprofitable in their second summer. More than 2lb. per day, or second day, per hundred hens in winter I absolutely will not allow, and in summer about 2lb. per hundred *per week*. My third year and fourth year hens always outlay the two-year-olds from July to October on this amount.—Yours, &c.,

A. S. GALBRAITH.

Bagshot.

*To the Editor of the*  
ILLUSTRATED POULTRY RECORD.

SIR,—As one who has taken a considerable interest in the question of feeding poultry, both in practice and in the laboratory, I should like to express my pleasure at reading the series of articles on “Some Feeding Problems.” As the author points out, there are very many problems still waiting to be solved, but the number of investigators is so few that years must elapse before the poultry-keeping public will reap the benefit of the present work of experimenters. There is only one question I would have the author answer, and it is this. I have read in one or two German papers that quite recently a new theory has been propounded to the effect that a knowledge of the “nutrient ratio” is of no practical use, but that the value and effect of every food depends on the form in which the various constituents are present. Information on this question would be appreciated.—Yours, &c.,

POULTRY INSTRUCTOR.

*To the Editor of the* ILLUSTRATED POULTRY RECORD.

SIR,—I am pleased to have had an opportunity of reading the letters by Miss A. S. Galbraith and “Poultry Instructor” dealing with the question of feeding. I have heard of the new theory mentioned in “Poultry Instructor’s” letter, and since completing the series on “Some Feeding Problems” I have set myself to gather all available particulars with reference to it. The point raised by Miss Galbraith is practically identical with the new method of feeding, as far as I have been able to learn of it. In the course of a month or two I hope to be able to deal fully with the important subject of starch *versus* sugar in the carbohydrates.—Yours, &c.,

THE WRITER OF THE ARTICLES.

## POULTRY IN A GARDEN.

WHEN poultry are kept purely for their utilitarian properties, they will undoubtedly give infinitely better results when worked in conjunction with some other branch, and there are very few branches but what can be linked with poultry with benefits accruing to both. Gardening, fruit growing, and dairy farming all blend harmoniously with the keeping of poultry. It is very often imagined that poultry do a great amount of damage in a garden—in fact, the two, poultry and garden, are considered altogether opposed. We cannot, of course, but admit that fowls are very destructive, and at certain periods of the gardener’s year they would be quite impossible, and would absolutely kill all plant growth. But at other seasons the benefits derived by the garden from being run over by fowls is of inestimable value. Whether the old impression is upheld that fowls are “bad



MONGRELS IN A GARDEN.

[Copyright.]

gardeners” depends entirely upon the owner and the method he adopts of working the two in conjunction. That they can be worked together with distinct advantage to each has been abundantly proved over and over again. To keep anything growing in a poultry run lessens, if not altogether obviates, the danger arising from impure ground. The cropping of a run will secure excellent crops, and at the same time purifies the land; thus animal and plant life are working together to their mutual advantage. We have come across few more practical methods of combining poultry with a vegetable garden than that explained in the following way by Mr. W. M. Elkington in his book, “The Amateur Poultry-Keeper”: “Divide the available ground into four enclosures, and build a commodious house with scratching accommodation at the intersecting point of the fences, a trap-door being provided to lead into each run, whilst gates give access to each enclosure. The result is that while one of these four enclosures carries the stock of poultry, the number of which must depend upon the extent of

the ground, the other three bear a crop of vegetables, carefully graded, so that as each crop is gathered in turn the fowls may be turned upon it, and their late run may be dug over and planted for a later crop. Thus, commencing in the New Year, one of the three plots may be sown and planted for early lettuces, spring cabbages, radishes, and such produce as will be gathered in the early part of the season. When these are removed, and the fowls brought upon the ground, where they will find grubs, worms, and plenty of green food, the vacated run may be prepared and planted for late cabbages, broccoli, vegetable marrows, celery, &c. The second enclosure, bearing a crop of early potatoes, peas, broad beans, and summer greens, will be ready about July, and that may in turn be given over to the fowls, whilst their later run, now well manured, can be planted for a winter crop: and, finally, the third enclosure, with late potatoes, beans, peas, and other vegetables, will be ready for the fowls by the end of the summer." This excellent plan may be carried out by the artisan on his small garden allotment, or on the more extensive scale of the market gardener, so long as the main principles are observed. The manure is one of the too often neglected by-products of poultry, but by the adoption of the foregoing plan the manure gets on to the land and to work immediately without any collecting and storage, which entails a certain amount of trouble. The manure is of such a concentrated nature, and so excellent as a top dressing for almost everything on a farm or garden, that it will more than doubly recompense the owner for any trouble and extra labour involved in collecting the night droppings from the house floor. There are several ways of preserving the manure; all are more or less good. Putting it, as collected, into a barrel or other receptacle is one of the most usual methods, but this plan is not to be recommended, since fermentation is set up, and this detracts considerably from the manurial value, in that much of the ammonia is lost. This may be prevented by spreading it thinly out between layers of dry earth as it is taken fresh from the house.

## THE POULTRY CLUB.

**A**N extraordinary meeting of the Council was held at the club's private room (in the gallery), Agricultural Hall, Islington, London, on Tuesday, October 4, at 3 p.m., when there were present Messrs. W. Clarke (chair), F. Bloomer, W. Richardson, J. Wilkinson, H. Wallis, W. J. Golding, T. Threlford, F. J. Broomhead, J. Horn, W. W. Broomhead, C. N. Goode, P. H. Bayliss, J. Carlton Hunting, Rev. E. Lewis Jones, and G. Tyrwhitt-Drake (hon. secretary and treasurer).

**RESULT OF ANNUAL ELECTION.**—The hon. secretary of the election sub-committee read the report of the election, which was as follows:

**PRESIDENT.**—F. Bateman, 59; Rev. T. W. Sturges, 48; H. Wallis, 442.

**SECTION I. VICE-PRESIDENTS** (three required).—R. Anthony, 112; O. F. Bates, 266; W. Bibby, 56; W. W. Dobson, 17; J. F. Entwisle, 123; W. G. French, 75; W. Hooley, 62; W. L. Horbury, 53; Dr. E. S. Jackson, 38; J. Lewis, 42; C. Preston, 28; G. H. Procter, 116; R. Watson, 143; J. Wilkinson, 274.

**SECTION II. VICE-PRESIDENTS** (three required).—T. Abbot, 26; Captain R. R. Allen, 200; F. Bloomer, 169; H. W. Buckland, 38; Miss Carey, 52; Dr. J. P. Cartwright, 47; A. De Winton, 14; W. M. Elkington, 134; S. E.

Fletcher, 10; R. Fletcher, Hearnshaw, 136; T. C. Heath, 99; J. S. Hicks, 210; F. W. Myhill, 40; Rev. J. B. Nodder, 65; C. Watson, 84; Major G. T. Williams, 57.

**SECTION III. VICE-PRESIDENTS** (three required).—A. W. Barrett, 4; P. H. Bayliss, 314; A. L. Cook, 18; W. H. Cook, 150; E. E. Doughty, 34; Dr. S. E. Dunkin, 24; G. Fielder, 45; A. C. Gilbert, 58; W. J. Golding, 363; J. Horn, 77; F. D. Little, 35; G. E. Pentelow, 21; Mrs. Prideaux, 47; Wm. Rice, 224; W. Richardson, 68; G. Smalley, 20; H. Vaux, 32.

**SECTION IV. VICE-PRESIDENTS** (three required).—W. M. Bell, 418; Milton Bode, 23; F. J. Broomhead, 432; E. J. W. Buckpitt, 21; Captain De Bathe, 185; P. Hanson, 16; H. Peel, 20; J. Pettipher, 44; T. Threlford, 395.

**WALES. ONE VICE-PRESIDENT.**—A. T. Johnson, 62; Rev. Lewis Jones, 302; S. W. Thomas, 80.

**SCOTLAND. ONE VICE-PRESIDENT.**—D. Reid, 294.

After the chairman had asked if any member wished to have an explanation of any matter connected with the report, Mr. Bayliss moved, and Mr. Wilkinson seconded, that the report be received and adopted. This was carried unanimously.

Mr. Wallis then moved a vote of thanks to the election sub-committee, and that an honorarium of five guineas be offered to the hon. secretary for carrying out his arduous duties. This was seconded by Mr. Bloomer, and carried unanimously.

FREDERICK J. BROOMHEAD.

Vice-President.

G. TYRWHITT-DRAKE,

Hon. Secretary and Treasurer.

Cob Tree, Sandling, Maidstone.

## THE BUFF ORPINGTON CLUB.

**A**T a committee meeting held at the Dairy Show, Agricultural Hall, Islington, N., on Wednesday, October 5, 1910.

**PRESENT.**—Mrs. Frank Bateman, Mrs. Wilkinson, Miss Edwards, Messrs. W. Richardson, H. C. Thomas, J. Turner, J. Entwisle, W. H. Cook, J. M. Galway, W. C. French, E. A. Cass, J. Wilkinson, F. Bloomer, and W. J. Golding (hon. secretary). Mr. W. Richardson was voted to the chair.

Mr. Frank Bateman wrote regretting inability to attend the meeting, but stating he was very much improved in health. A vote of sympathy was passed, and earnest hopes that he might soon be quite restored to good health again.

**NEW MEMBERS.**—The following were elected members of the club: H. Lilley, Ipsley Poultry Farm, Redditch, Worcestershire; Miss Gilling, Stawell House, Richmond, Surrey; M. Beale, 19, Raleigh Street, Islington; and S. Williams, 11, Springfield, Upper Clapton. It was resolved that Mr. W. C. French be appointed delegate on the General Committee of the Combined Specialist Club Show.

W. J. GOLDING,

Hon. Secretary and Treasurer.

Westwood Farm, Weald, Kent.

## NATIONAL SINGLE-COMB BLACK ORPINGTON CLUB OF AMERICA.

*To the Editor of the ILLUSTRATED POULTRY RECORD.*

SIR,—I would be very glad if you would note in your paper that the American Black Orpington Club is open to English members, and the dues are one dollar per year. Membership gives free insertion of members' name and address in the Club Directory, and would be very valuable advertising for any English breeder.—Yours, &c.,

MILTON W. BROWN, Secretary-Treasurer.

Station L., Cincinnati (O.).

## THE BUSINESS SIDE OF THE DAIRY SHOW.

"WHICH is the most interesting feature of the Dairy Show?" is a question difficult to decide, because there are so many attractive phases to the great annual display at the Agricultural Hall. To the poultry-keeper and the majority of the general public the galleries are always the centre of attraction; first, we presume, because the feathered stock are to be found there, and, secondly, on account of the very large and attractive display made by manufacturers of poultry foods and appliances.

The Council of the British Dairy Farmers' Association this year resolved upon a bold step, that of eliminating from the awards lists the medals and other honours given in the past for incubators, brooders, poultry houses and other appliances. Previously, the awarding of medals in the two first-mentioned classes have been the means of causing considerable dissatisfaction amongst manufacturers because it was generally recognised that a judge could not form an accurate opinion of their merits by a mere superficial scrutiny. The step taken by the Council was favourably commented upon by manufacturers generally, with the result that a far better feeling existed between them than on previous occasions.

One of the largest exhibits was that of Messrs. Spratt's Patent, Limited, 24 and 25, Fenchurch Street, E.C., who had their usual two bays—one for foods and the other for the famous "Hearson" incubators, foster-mothers, and other appliances. Of poultry foods one need only mention that "Laymor" occupied a very prominent position. This food has become universally popular since its introduction some two years ago on account of its excellence for promoting egg-production. "Chikko," a dry food, is another of Messrs. Spratt's popular lines, and when used in conjunction with their chicken meal is acclaimed one of the best foods for promoting growth of bone, feather and flesh. The firm were distributing an excellent little *brochure* entitled "The Common Sense of Chicken and Poultry Rearing," containing many useful hints on the management of poultry, which they will readily forward to any reader of this paper upon application.

In the corner of the east gallery and adjacent to the Berners Hall, wherein the table poultry were displayed, Mr. Randolph Meech, of Poole, Dorset, had his usual prominent show of poultry houses and appliances. Mr. Meech's exhibits were so extensive and varied in character that it is somewhat difficult to single out a particular feature, unless, perhaps, it is his much advertised "Improved Bargainette" house which is built with a tenoned and morticed frame, with screwed and planed inside framing. This is in many respects a marked improvement upon the original "Bargainette," yet the price is one which should appeal to every class of poultry-keeper. Mr. Meech has just completed his new works, which were necessary in consequence of the serious fire which occurred some twelve months since, and the whole now form one of the largest and best equipped establishments of their kind in the country. The plant laid down is of the newest and most up to date, and enables the proprietor to turn out his wares not only more cheaply, but of far better value than hitherto.

Mr. William Tamlin, of 40, St. Margaret's, Twickenham, made a bold and attractive display of incubators, foster-mothers, poultry houses, and other appliances, to say little of a variety of foods, grits, medicines, &c. "Tamlin's" is always an interesting exhibit. The "Nonpareil" Incubator has been exhibited in every part of the globe, and on every occasion has been awarded the highest possible honours. In addition to numerous trophies secured on the Continent, in the Colonies, and

at home, the "Nonpareil" Incubator has on five occasions been judged worthy of the highest award obtainable in the British Isles—the Dairy Show silver medal. Perhaps the most striking speciality on view was the "Wonder" house, a cheap and serviceable little building that serves admirably as a cockerel pen or even as a roosting place for a small flock of fowls. It is 5ft. 6in. long, 3ft. 6in. wide, and 3ft. 8in. high, and is fitted with a sliding shutter which can be adjusted in three positions, one half of it being boarded and the other half covered with canvas. Thus the house can either be closed up, with the canvas hiding the wire netting front and still allowing ample ventilation, or in the day-time the wire netting can be exposed, whilst the canvas shutter covers the open door, or, drawn back further still, the house is thrown open.

Mr. A. E. W. Phipps, of Harborne, Birmingham, as usual had a splendid display of "Perfection" incubators and foster-mothers, which have earned for themselves world-wide praise from users throughout the universe. In addition he had on show a wide range of poultry houses, scratching sheds, &c., including such well-known structures as the "Utility," "Clifton," "Woodville," "Alexandra," "Franckley," and "Pioneer."

Poultry houses were the principal feature at a large number of the stands, and it is therefore necessary to deal with them collectively. Amongst many deserving of special reference were those of Messrs. J. T. Hobson and Company, of Bedford, whose more striking lines included the "Umpire" poultry pen, a structure measuring 6ft. by 4ft. and 4ft. high. It is made of best red deal, sides, ends, and roof of 5-8in. planed, tongued and grooved material. The "Farmer's" poultry house, a roomy structure made in sections from 3-4in. best quality red deal boards, planed, tongued, and V-jointed, the "Challenge" poultry pen, and the "Ascot" house on wheels were other lines of remarkable value.

Much originality was shown by Mr. W. F. Snell, of Marsh Farm, Yeovil, in his appliances, particularly in regard to the "Idenleigh Pen," which was used in the U.P.C. Laying Competition (Southern Section) last year, and the "Ever Handy" coop. The latter possesses a hinged weather-board shutter which can be changed from one side to the other in an instant.

Messrs. Chas. Toope and Son, of Stepney, E., had an attractive display of poultry houses, all of which had been treated with a special preservative. They were all strongly made, of best material, and listed at very moderate prices. This firm also showed examples of their outdoor and indoor brooders and a variety of smaller appliances.

Mr. Horace W. Stephens, of Gloucester, is a young man of ideas, and it is pleasing to note that his business steadily grows in consequence. Many of the houses exhibited by him are worthy of special mention, particularly the "Matson," a house 5ft. long by 3ft. 6in. wide and fitted with sliding shutters, so that the front can either be thrown open, closed entirely, or covered with wire netting. Mr. Stephens was also showing the "Glevum" incubators and foster-mothers, two well known hot-air appliances.

A fine show of coops, runs, incubators, brooders, and poultry houses was made by Mr. Harry Hebditch, of Martock, Somerset, who had two stands, while equally praiseworthy were the exhibits of poultry appliances made by Mr. E. H. Taylor, of Welwyn. Mr. Arthur Neaverson, of Peakirk, near Peterboro', and Mr. John Service, of Arkley, Barnet.

Amongst firms devoting their main attention to incubators, brooders, and foster-mothers were the Incubator Components Company of Gloucester, whose "Gloucester" hot-air appliances have earned for themselves world-wide commendation. These machines, we learn, have given excellent results under very trying conditions, not only in Great Britain but in other countries, and we are

pleased to record that during last season the firm had but one occasion to fall back upon their guarantee—viz., “to refund money if purchase is considered unsatisfactory”—and even in this case the machine was found to work satisfactorily when purchased by another customer. The new device which was introduced into the 1910 “Gloucester” incubator, which enables the operator to remove chicks from the nursery without opening the door of the machine, fully described in this journal some months since, has been universally praised by all users.

The Cyphers Incubator Company, of 119-125, Finsbury Pavement, E.C., made a very imposing display of their well known and widely used American incubators and brooders, which were fully described in the October number of the RECORD. Those readers who overlooked this feature should make a point of perusing it, for therein they will find much useful and interesting reading.

“The Triumph Incubator,” the popular invention of Mr. Wm. Lea, of Birkdale, Southport, continues to gain favour, and we are pleased to record that business has been extremely brisk during the past season. Mr. Lea also showed the “Scientific Hen” foster-mother, which has an excellent system of heating.

A firm which has made considerable progress since its introduction about two years since is the Dependence Incubator Company, Limited, of Cambridge Street, Birmingham. They are makers of hot-air and hot-water types of incubators, both of which have given the fullest satisfaction. In addition to the above they were showing five different models of foster-mothers.

Messrs. A. W. Gamage, Limited, of Holborn, E.C., also had a striking display of appliances, including the well known “Holborn” incubators and foster-mothers, the former made in four sizes and the latter in two sizes. Poultry houses, coops, runs, and an effective lime-washing machine—which will cover 200 square feet in five minutes—were also to be viewed.

Messrs. Finch and Fleming, Limited, of Pulloxhill, Amptill, Beds., were showing the well-known “Prairie” incubators, the “F. & F.” brooders and a full line of poultry sundries. Their stand was a very attractive one.

The “Gilpa” incubators and foster-mothers, with which the name of Gilbertson and Page, Limited, of Hertford, is so closely associated, were to be seen, and we learn that these excellent and well made appliances are daily gaining favour, especially amongst game rearers. A full line of poultry and game foods was also to be inspected.

Egg boxes, which are naturally an important factor in the success of the poultry and dairyman's business, were to be seen in great numbers, and amongst the firms who make a speciality of this trade were Messrs. Robinsons' Patents, Limited, 332, Goswell Road, E.C., whose “Anti-Smash,” “Smithfield” and Farm produce boxes are well known and universally used. Other makers included the Dairy Supply Company (28, Museum Street, W.C.), The Dairy Outfit Company (King's Cross, N.), and T. B. Bethell (Crown Works, Boundary Road, Liverpool).

Poultry food manufacturers were, of course, largely represented, and in addition to those mentioned in connection with the manufacture of appliances were Messrs. A. Thorpe and Son, of Rye, Sussex. As usual they had a very nice display of foods, and we learn upon inquiry that the past season's business has exceeded by far any they have previously accomplished. Messrs. Thorpe justly claim to sell only “the best,” upon which they have built up their very large connection. “Cock o' the Walk” poultry meal continues to be acclaimed as the finest poultry feed extant—*vide* customers' testimonials—and their Sussex Ground Oats, Sussex Dry Chick Foods, “Lactoma” and “Oatum.” Chicken Meals have had a very large sale.

The Molassine Company, Limited, of Greenwich, S.E.,

had two tastefully arranged stands, whereon they exhibited their well-known Molassine Meal for all stock and Molassine Poultry Meal.

“Clarendo,” the poultry meal with which the firm of White, Tomkins, and Courage, Limited, of 48, Mark Lane, E.C., is so closely associated, was on view, and at the stand the energetic Mr. J. G. Edwards presided; here good business was reported. The “Castle” Dog, Game and Poultry Foods manufactured by the Queenborough Food Company, Limited, of Queenborough, Kent, were displayed on an attractive stand, and we learned that the excellent quality of their wares had secured for the firm many repeat orders and much increased custom. On this stand was also shown a new self-filling drinking fountain for poultry, which, though acting automatically, can be filled from the top—an improvement upon the ordinary self-filling device. This appliance, which is the invention of Mr. F. Matthews, a member of the firm, we hope to illustrate at an early date.

Foods were also shown by Messrs. J. Thorley, Ltd., King's Cross, N., the proprietors of “Ovum” spice; Messrs. R. Hyde and Company, Ltd., of Camberwell, S.E., who are the inventors of “Vitaz” poultry food and poultry spice; Mr. A. Stiles, Springbank Mills, Heathfield, Sussex, manufacturer of “Springbank Complete” Poultry Food; Messrs. Armitage Bros., Ltd., Nottingham, who claim to be the originators of the Dry Feed system of chicken rearing; Messrs. Spillers and Bakers, Ltd., Cardiff, whose “Victoria” Chicken Meal and Dry Chick Foods are universally used; Messrs. Geo. Cooper and Sons, Bramford, Ipswich, makers of Special Laying Meal, “King of Dry Foods,” and “Meatenmeal”; Messrs. Walker, Harrison and Garthwaites, Ltd., Ratcliff Cross, E.; Messrs. Joshua Ashby and Sons, Brixton Mills; Liverine, Ltd., Grimsby; the Allen Poultry Co., Ltd., Sawbridgeworth, Herts; and the Uveco Cereals, Ltd., Corn Exchange, Liverpool.

A new food recently introduced by Messrs. Clarkes, of Limehouse, E., called “Vigam Rusks,” is worthy of special mention. This food is manufactured by a new process, and contains animal matter and concentrated meals of uniform quality in the form of a single cake. For it the inventors claim marvellous results; incorporated in the size of an ant's egg are all the essential proportions for the development of bird life and egg-production. A sample packet will be readily forwarded free upon application. Very interesting indeed was the display made by the well-known firm of T. Craven and Sons, of 97, Corporation Street, Manchester, upon whose stand was to be seen a large assortment of useful appliances for dog, poultry, and pigeon keepers. Practically everything of use is supplied by Messrs. Craven, who issue a very large illustrated catalogue of their wares.

Mr. William H. Cook, of the Model Poultry Farm, St. Paul's Cray, Kent, had a tastefully arranged stand upon which were shown many excellent views of his farm and prize-winning birds; he also had an assortment of meals, grits, and medicines, all of which he has used with success and confidently recommends to his customers. Medicines and foods were also shown by Mr. J. H. Dixon-Jenkinson, of Handsworth, Birmingham; Mr. W. Vale, of Tower House, South Norwood, S.E.; and Messrs. Proud and Son, Birkdale, Southport.

“The Originators of all the Orpingtons,” Messrs. William Cook and Sons, of Orpington House, St. Mary Cray, Kent, occupied their usual prominent position, where they had a display of egg-producing powder, biscuit meals, grits, oyster shell, &c. Mr. A. L. Cook was in charge, assisted by a large staff, who were kept very busy attending to the requirements of the firm's world-wide connection. Mr. Cook reports a record season for chickens and eggs, and next season should find further developments in the undertakings of this well-known firm.

## MARKETS AND MARKETING.

### Week Ending Sept. 24.

Game being much in demand, chickens, though plentiful and reasonable in price (from the consumers' point of view), realised rather a slack demand. The spell of warm weather was an unfavourable factor for poultry. The few capons which came to market met with a favourable reception. The trade in English new-laid eggs was inclined to be firmer, but many people being away on holidays, any further tendency to a rise was checked. The Board of Agriculture's weekly return of market prices gave the various market prices for eggs as follows: London, 1s. 4d. to 1s. 3d. per dozen; Chichester, 1s. 3d. and 1s. 2d.; and Dorchester, 1s. 3½d. and 1s. 2d. Carlisle, 1s. 4d.; Hereford and Ipswich, 1s. 2d. and 1s.; and Ruthen, 1s. 2d. and 1s. 1d. The market for foreign eggs remained much the same as the previous weeks, the demand being slightly better for the cheaper eggs. Reports from Russia indicated that the fowls were not laying so freely as is usual at this period. At Liverpool the demand for Irish eggs was better. At Manchester eggs were considerably dearer, also at Newcastle-on-Tyne, Glasgow, Greenock, and Leith. The imports of foreign eggs during the week amounted to 407,204 great hundreds, and the value of foreign poultry and game to £1,973 and £1,683 respectively.

### Week Ending October 1.

The demand for English poultry was better during the week under review than was the case last week. Larger birds were in demand, as is usual during the autumn and winter months. Capons and goslings met with fair trade; the demand for the latter was not, however, great; these birds have gone out of favour very much during recent years.

English Game was in good demand. Pheasants coming in checked the poultry trade considerably.

The demand again proved excellent for English eggs, but shortness of production unduly enhanced prices and checked demand towards the end of the week.

The trade in better-class foreign eggs showed a tendency towards slackness, only cheaper-class goods of fair quality meeting brisk demand. Hungarian, Styrian, Galician, Roumanian, and Russian eggs sold freely.

On the Liverpool markets prices ruled unusually high for the period. The Manchester market was very firm, and good trade was reported at Birmingham and Newcastle-on-Tyne, where English eggs were very scarce. The price of Irish eggs advanced 6d. at Glasgow. Leith market was again dull.

### Week Ending October 8.

English poultry sold very freely during the week, but at rather low prices. The warm weather checked the trade in Game considerably, to the advantage of poultry-producers. Small turkeys were in good demand, coming as a welcome change.

The London market was very firm for eggs, supplies being very short. The trade for foreign eggs remained much the same as last week, with the exception of Italians, which advanced. The arrivals of Danish eggs were large, but it was felt that with prices rising on the Continent supplies would fall considerably. Winter having already set in in Russia, the trade in fresh eggs from that country was almost at an end. There are very large quantities of Russian eggs in cold store both in this country and Russia, some of which have been held over from September, 1909. Speculation is rife as to how they will turn out.

The trade in eggs was rather slack on the Liverpool markets owing to the high average of prices. Irish eggs met with good demand. Manchester market continued to rise, also Newcastle-on-Tyne, Greenock, Glasgow, Hull, and Birmingham.

### Week Ending October 15.

The trade in English poultry showed no marked change from the previous week, demand being very fair. Young turkeys met with a good reception and sold at prices which were higher than those of the previous week.

English eggs were very scarce, and the trade was in great difficulties to meet the demand, production having come to a sudden stoppage.

The foreign egg trade remained much the same as the previous week. Better quality of Continental eggs advanced 6d. in value. Indications pointed to a further rise in cheap eggs, and it was felt that stocks at Cotton's Wharf would come to an end before the week was out, which had not been the case for a very considerable time.

The Liverpool market was restricted owing to high prices. The French strike was beginning to make itself felt on the various markets in this country. Trade remained firm all through the Northern and Midland markets.

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## DEALERS' RINGS.

SEVERAL complaints have been received from chicken rearers in Ireland relative to the alleged domination of some of the live poultry markets by rings of dealers. The increased dissemination of news affecting poultry producers, and the awakening of the industry in general, has impressed upon these rearers the obvious fact that the disparity between the price they receive and that which the fatteners pay is too great, and that the profits are altogether unequally apportioned in relation to the work of the producer and that of the dealer or middleman. It is, therefore, not surprising to hear from a correspondent of birds being taken home from markets where the margin was too narrow for even an Irish peasant, and of endeavours being made to find more satisfactory outlets. The dealers should realise that conditions have considerably changed during recent years, and that it is a suicidal policy to carry the oppression of the rearer too far.

# TABLE OF PRICES REALISED FOR HOME, COLONIAL, AND FOREIGN POULTRY, GAME, AND EGGS FOR THE FOUR WEEKS ENDING OCTOBER 22, 1910.

## ENGLISH POULTRY—LONDON MARKETS.

DESCRIPTION.	1st Week.		2nd Week.		3rd Week.		4th Week.	
	Each.		Each.		Each.		Each.	
Surrey Chickens .....	2/6	to 5/0	2/6	to 5/0	2/6	to 4/6	2/6	to 4/6
Sussex .....	2/6	" 5/0	2/6	" 5/0	2/6	" 4/6	2/6	" 4/6
Yorkshire .....	2/0	" 3/0	2/0	" 3/0	2/0	" 3/3	2/0	" 3/3
Boston .....	1/9	" 2/9	1/9	" 2/9	2/0	" 3/3	2/0	" 3/3
Essex .....	1/0	" 2/0	1/0	" 2/0	2/0	" 3/0	2/0	" 3/0
Capons .....	4/6	" 6/0	4/6	" 6/0	4/6	" 6/6	4/6	" 6/6
Irish Chickens .....	1/6	" 2/6	1/6	" 2/6	1/9	" 2/6	1/9	" 2/6
Live Hens.....	1/3	" 2/0	1/3	" 2/0	1/4	" 2/0	1/3	" 2/0
Aylesbury Ducklings..	—	—	—	—	—	—	—	—
Ducks .....	2/0	" 3/0	2/0	" 3/0	2/0	" 3/0	2/0	" 3/3
Geese.....	5/0	" 7/6	5/0	" 7/6	5/0	" 7/0	5/0	" 6/6
Turkeys, English .....	—	—	—	—	—	—	—	—
" Irish .....	—	—	—	—	—	—	—	—

## ENGLISH GAME—LONDON MARKETS.

DESCRIPTION.	Each.		Each.		Each.		Each.	
	Each.		Each.		Each.		Each.	
Grouse .....	2/6	to 3/0	2/6	to 2/3	2/0	to 2/6	2/0	to 2/6
Partridges.....	2/0	" 2/6	1/9	" 2/6	1/9	" 2/0	1/9	" 2/3
Pheasants .....	—	—	2/6	" 3/9	2/0	" 3/3	2/6	" 3/3
Black Game .....	2/0	" 2/9	2/0	" 2/9	2/0	" 2/6	2/0	" 2/6
Hares .....	—	—	—	—	1/9	" 3/0	1/9	" 3/0
Rabbits, Tame .....	1/0	" 2/0	1/0	" 2/0	1/0	" 2/0	1/0	" 2/0
" Wild .....	0/4	" 1/0	0/4	" 1/0	0/4	" 1/0	0/4	" 1/0
Pigeons, Tame .....	—	—	—	—	—	—	—	—
" Wild .....	—	—	—	—	—	—	—	—
Wild Duck .....	—	—	—	—	1/6	" 2/0	2/0	" 3/0
Woodcock .....	—	—	—	—	2/0	" 2/9	—	—
Snipe.....	—	—	—	—	—	—	0/6	" 1/0
Plover, Golden .....	—	—	—	—	0/6	" 1/0	0/6	" 1/0

## ENGLISH EGGS.

MARKETS.	Per 120.		Per 120.		Per 120.		Per 120.	
	Per 120.		Per 120.		Per 120.		Per 120.	
LONDON .....	11/8	to 14/2	12/0	to 15/0	13/0	to 16/6	14/0	to 17/6
Provinces.	Eggs per 1/-		Eggs per 1/-		Eggs per 1/-		Eggs per 1/-	
MANCHESTER .....	9	to 10	9	to 10	9	to 10	9	to 10
BRISTOL .....	1/3	to 1/4	1/3	to 1/4	1/3	to 1/4	1/3	to 1/4
	per doz.		per doz.		per doz.		per doz.	

## FOREIGN POULTRY—LONDON MARKETS.

COUNTRIES OF ORIGIN.	PRICES REALISED DURING THE MONTH.			
	Chickens. Each.	Ducks. Each.	Ducklings. Each.	Geese. Per lb.
Russia .....	Practically no trade.			
Belgium .....				
France .....				
United States of America .....				
Austria .....				
Canada .....				
Australia .....				

## IMPORTS OF POULTRY AND GAME. MONTH ENDING SEPTEMBER 30, 1910.

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Game.	Poultry.
Russia .....	£202	£1,132
Austria-Hungary.....	306	1,135
France .....	450	2,968
United States of America .....	—	—
Other Countries .....	4,270	3,608
Totals .....	£5,228	£8,843

## IRISH EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
Irish Eggs	9/3 to 10/6	9/9 to 11/0	10/3 to 11/9	11/0 to 12/0

## FOREIGN EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
French ...	9/3 to 11/0	9/6 to 11/6	9/6 to 12/0	9/6 to 12/0
Danish ...	9/9 " 11/6	9/9 " 12/0	9/9 " 12/0	9/9 " 12/0
Italian ...	10/0 " 11/6	10/0 " 11/6	10/0 " 11/6	10/0 " 12/3
Austrian...	6/9 " 9/0	7/0 " 9/3	7/6 " 9/6	7/6 " 9/9
Russian ...	7/0 " 9/3	7/6 " 9/6	7/6 " 9/6	7/6 " 9/9
Australian.	—	—	—	—
Canadian..	—	—	—	—

## IMPORTS OF EGGS. MONTH ENDING SEPT. 30, 1910.

COUNTRIES OF ORIGIN.	Declared Values.	
	Quantities in Gt. Hund.	Declared Values.
Russia .....	1,012,934	£360,939
Denmark .....	379,404	167,151
Germany .....	9,970	3,800
Italy .....	10,488	6,921
France .....	75,728	32,666
Austria-Hungary	70,850	27,838
Other Countries	74,574	30,283
Totals.....	1,639,948	£629,598

## ANSWERS TO CORRESPONDENTS.

*The Editor will be glad to hear from readers on any Poultry Topics, and all Queries addressed to the paper will be answered if possible in the issue following their receipt. The desire is to help those who are in any difficulty regarding the management of their poultry, and accordingly no charge for answering such Queries is made. Unless stated otherwise, Queries are answered by*

F. W. PARTON,

*Lecturer in Aviculture, The University, Leeds.*

### Eggs or Chickens?

I am thinking of starting poultry-keeping in quite a small way, and I write to know whether it will pay me better to buy pullets now or wait until the spring and hatch the birds myself? I am thinking of keeping Buff Orpingtons, as I have been told these are the best winter layers.—R. T. W. (Leicester).

It will be better for you to start now by purchasing pullets. We cannot say that Buff Orpingtons are the best winter layers, but they are very good in this direction, and should answer your purpose admirably.

### Floor Space.

How big should the roosting-place be for a dozen adults, and is it necessary to have a covered-in run as well as a sleeping compartment?—R. S. (Bedford).

Two square feet of floor space should be allowed in the house for each bird. It is not an absolute necessity that you have a covered-in run as well as a sleeping compartment. At the same time, it is an excellent addition, and more fowls may be kept, where space is limited, than were the covered-in run not provided.

### Tainted Soil.

Some of my chickens are looking very seedy, and I have been told my soil is foul, and that this is the cause. What can I do to bring back the purity of the soil? Is gas lime any use?—E. D. S. (Aberdeen).

Your chickens should be instantly removed from their present quarters, and the vacated space treated in the manner exhaustively dealt with in the September, 1909, number of the ILLUSTRATED POULTRY RECORD.

### Buff Rocks.

Is there such a breed as the Buff Rock? I have some fowls which I thought were Buff Orpingtons, but I am told they are not. Is the Buff Rock a pure breed, or is it a cross?—T. M. E. W. (Ross).

The Buff Plymouth Rock and the Buff Orpington are very similar, the chief difference being in the colour of legs, the former having yellow and the latter white legs. The Buff Plymouth Rock may now be regarded as a pure breed, as much so as any other of the newer varieties of poultry.

### Dry Chick Feed.

1. What would be the substitute for (a) dari; (b) pin-head oatmeal; (c) cut green-bone in rations for

chickens? 2. A more simple dry chick feed for first two weeks?—L. M. (Arcachon-Moulleau, Gironde).

1. (a and b) Increase the wheat by 10lb., the broken maize by 5lb., and the buckwheat by 6lb.; (c) decrease the maize by 2lb. if cut green-bone is not fed. 2. 30lb. wheat 14lb. canary seed, 20lb. maize, 21lb. buckwheat, 10lb. rice, 10lb. meat, and 7lb. grit; or 35lb. wheat, 25lb. maize, 30lb. buckwheat, 15lb. meat, and 7lb. grit.

### A Point in Housing.

Why is the old form of ladder perch so condemned, for I always use this kind and get very good results indeed? My fowls seem quite healthy and lay well.—L. R. H. (Penrith).

The objection to the ladder form of perch is that fowls invariably aim for the topmost rung, hence it is overcrowded, while probably the lower portions are almost empty. A further objection is that danger may arise from cold, due to a draught, caused by too high perching, which will bring the birds directly into the current of air overhead. Since you claim perfect health in your poultry and very good results, although using the ladder-shaped perch, probably the first objection mentioned is obviated by your only keeping a small number of fowls, which the top rung can accommodate, without undue crowding, and, secondly, your ventilation may be so arranged that birds perching high may escape draught.

### Shape of Eggs.

Can you suggest any first-cross or any pure breed (good sitters) that will lay an egg different in shape or size to the White Wyandotte to prevent mixing the breeds as much as possible, as I have only room for one pen?—J. N. (Royston).

The laying or non-sitting breeds lay quite a different shaped egg to the White Wyandotte, but there is no general purpose breed that lays an egg different in shape to the White Wyandotte. The Langshan lays a very much deeper coloured egg, so that this would enable you to distinguish between them.

### Short Replies.

E. P. (Thatcham): Yes.

M. S. (Tetbury): Next spring.

C. E. T. (Staines): Sixty-five to seventy.

N. O. G. (Botley): Southampton or London.

M. C. F. (Wickham Market): The American Bronze.

M. B. B. (Strabane): About the middle of November.

ENQUIRER (Bromwell?): We know of no such material.

O. R. (Aysgarth): Mostly from France, but a few from Belgium.

L. S. (Madrid, Spain): We are forwarding your letter as required.

W. W. B. (Queenstown Junction): What you suggest is quite impossible.

R. H. A. (Finchley): Your suggestion is an admirable one and we will act upon it at once.

E. M. O. (Burdley): We do not know, nor do we know where you can obtain such information.

S. D. (Richmond Hill): 1. In 1879. 2. "Poultry Fattening," price 1s. 2d. post free from this office. 3. 8s. per annum.

R. T. N. (Waverley): Your suggestion is by no means original. It was tried in 1874, and again in 1892, and both times proved a dismal failure.

P. H. (Bordeaux): The address you want you will find in our advertising pages. The firm is a thoroughly reliable one, and you may safely leave the matter in their hands.

## YORKSHIRE NOTES.

By FRED W. PARTON.

THE remarkably warm and genial weather that has prevailed during September and October has had the effect of bringing the late-hatched pullets on in a very satisfactory manner, and has given them a start that would have been impossible during less favourable weather. Upon a few, but unfortunately too few, Yorkshire farms they adopt the very sensible plan of hatching a number of chickens in the autumn, these being intended as layers when the earlier-hatched pullets are moulting next year. Thus the obtaining, as far as possible, of a succession of moultings assists very greatly in securing a succession of layers. The fine weather has had an excellent effect upon such chickens, and they bid fair to fulfil the purpose for which they are intended.

I have noticed, however, that many of the March- and April-hatched pullets have begun to lay, assisted, doubtless, by the August-like warmth. It has given great satisfaction to many farmers, but it is a very doubtful benefit, since they will probably be less likely to lay when the severe weather arrives. However, they argue that an egg in the hand is worth two in the bush, and they are certainly getting them, with prices ruling at five and six for a shilling.



WHITE WYANDOTTE PULLETS.

The Property of Mr. C. N. Goode, South Milford, Yorks.

[Copyright.]

It is highly gratifying to report that table-poultry in Yorkshire are greatly improving, both in numbers and in quality. While egg-production must ever stand pre-eminently first, especially in the West Riding, yet this more lucrative branch can be catered for without the neglect, which hitherto has been so pronounced, of the table properties. The breeds that are mostly chosen for this purpose are the White Orpington and the Faverolles, either pure or crossed with some suitable breed. These grow into large birds, and when the frame is covered with flesh, which is usually done by feeding from a pen, they present a very pleasing chicken from the edible standpoint. The farmer, however, sometimes errs on the side of over-feeding when the birds are penned; he does not, therefore, secure the best results, since the birds cannot be penned up so long as those that are more sparingly fed. This, however, is a point which doubtless he will grasp after more practical experience, and the desire to improve still further will come as better prices are obtained.

## TRADE NOTICES.

## Brussels Exhibition.

We hear that the judges at the Brussels International Exhibition have awarded three Grand Prizes and two Diplomas of Honour to Messrs. Spratt's Patent, Limited, for the superior excellence of their world-renowned dog, poultry, and cage-bird foods. During the fifty years of their existence Messrs. Spratts have had many honours showered upon them, among the most recent being the Grand Prizes gained by them at the Franco-British and Japan-British Exhibitions—a fact which speaks volumes for the deserved confidence placed in their manufactures.

## Mr. Tamlin's Exports.

The following is a list of W. Tamlin's exports for September, 1910: Twelve cattle-boxes, two 100 incubators, one 100 foster-mother, to J. E. Davenport, New Zealand, per ss. Ruapehu; two 30 ostrich incubators, to Capetown, per ss. Edinburgh Castle, per order of Woodhead Plant; two 60 incubators, two 60 foster-mothers, to Ceylon, per order of Durant, Radford, and Co.; one 100 incubator, to Bangkok, per order of H. A. Badman and Co., per ss. Palermo; six 100 incubators, six 60 incubators, six 60 foster-mothers, to Oakes and Co., India, per ss. Golconda; one

100 incubator, to E. James, Western Australia; six 60 incubators, six 100 incubators, six 100 foster-mothers, to Salisbury, Rhodesia, order of Julian Stephens, Limited; three 200 incubators, two 100 incubators, one cramming machine, to J. Girona, Spain; one 100 incubator, one 100 foster-mother, to Mrs. Forsyth, South America; and one 60 incubator, to C. Kelly, West Coast of Africa.

## Slug Destroying.

Slugs are among the worst enemies which agricultural growers have to fight, for the crops usually attacked by them are valuable ones, and the loss through their depredation is correspondingly great. Vaporite may be used very effectively against combating this enemy, as the experience of Mr. M. Dowsett, the well-known market gardener, of Broomfield, near Chelmsford, shows. Mr. Dowsett writes that the first lot of beans he planted for forcing were nearly all destroyed by slugs, but he planted

again, using Vaporite, and did not lose two per cent. of the plants. He adds that he believes if he had used Vaporite earlier in the season it would have repaid him more than double its cost.

### Smart Building Feat.

As a result of the fire which demolished one of the warehouses at the A.B.C. Wharf last May, Messrs. H. Newhouse and Co., Ltd., decided to carry out some very important structural alterations, one feature being the erection of a large warehouse of 3,328 square feet of floor space. The order was entrusted to Messrs. Wicks and Sons, Ltd., building contractors, of the Cattle Market, Norwich, on May 31, and the whole work has been carried out under the supervision of Mr. A. W. Chastney, the managing director. The contractors' men were at work excavating for the foundations on June 1. Although the building is of a substantial character, being constructed of local manufactured hard red bricks outside, Fletton bricks inside, topped by a large double-span slate roof, and lighted by 640 square feet of simplex glazing, the whole contract was completed in eighteen working days. The floor or deck of the building is raised on brick piers, so that traffic handled need not be lifted on to carts, but can be wheeled straight on from the warehouse, this system saving a vast amount of time and labour. A loading platform runs along the whole front of the building, and is covered by a single lean-to roof, extending 20 feet out, to enable vehicles to load, no matter what the state of the weather is. The new warehouse is served by two powerful electric cranes. The electric lighting has been efficiently carried out by Messrs. Woolnough, of St. Stephen's.

### Messrs. Chas. Toope and Son,

Of Stepney Square, London, E., the well-known heating experts and appliance manufacturers, inform us that they have recently extended their premises considerably in order to cope with their increased volume of business. As an example of this increase they mention that the sales of their poultry houses alone are 100 per cent. better than twelve months ago. The firm's catalogue, with which we have been favoured, fully explains the working of the "Asbestos Hen" and other incubators, the principal feature of which is that the hot-air and hot-water principles are combined in the same machine; and gives particulars of their ingeniously designed "Challenge" brooder heater and house heaters, with diagrams showing the heating systems in position, of their automatic non-freezing poultry fountain, of the "Toope" trap-nest, which they claim cannot become defective in working, of the "Toope" brooder-house, the drying and fluffing pen, and the "Lightning" lice killer. The catalogue is excellently got up and lavish in its illustrations, while for those who do not know the district where the works are situated there is a sketch map on the inside front cover. An index is also a useful adjunct to this publication.

### Finch and Fleming, Ltd.

The Bedfordshire firm of appliance-makers and poultry-breeders—Pulloxhill, Ampthill, Beds, is the correct address—send us their annual catalogue and price list, which is a model of what such a catalogue should be. The combination of poultry-keeping with appliances ensures the practical value of the latter, and we are not, therefore, surprised at the popular welcome that has been extended to the firm's famous "Prairie" incubator and other manufactures. Some effective improvements have been made in the "Prairie," which is, of course, of the hot-air type, and perhaps we need not remind our readers that a liberal guarantee is issued with this article. There is an excellent description of it in the catalogue. The "F. & F." top-lighted brooder is another of their many specialities. A sketch of Mr.

Fleming's career as a fancier was given, as our readers may remember, in the "Who's Who" of the RECORD of last June.

## THE UTILITY POULTRY CLUB.

THE fourteenth annual general meeting of the Utility Poultry Club was held in the club-room, Agricultural Hall, on Thursday, October 6, at three o'clock. Mr. Ralph Dixon was in the chair, and besides Mr. Percival (President), Mr. B. W. Horne (Vice-President), four members of the committee, and the hon. secretary, forty-three other members were present.

The following were elected officers for the ensuing year: Mr. P. Percival, President; Mr. B. W. Horne, Vice-President; Mr. R. S. Summerhays, hon. treasurer, in the place of Mr. W. M. Macbeth, resigned; Mr. L. W. H. Lamaison, secretary; Mr. G. A. Palmer and Mr. Charles Longbottom, committee.

The accounts, which showed a satisfactory balance of £44, were received and adopted. During the year 267 new members joined, and the number of 5s. subscribers showed a satisfactory increase. It was decided to send notice by post to those members who had not paid their subscriptions, that failing payment by November 1 their membership would cease.

A resolution expressing regret at Mr. Macbeth's retirement was carried. Satisfactory reports were given on the arrangements made for the two Four Months' Laying Competitions, commencing on October 18, at Grimley and Bartle, and being held by the club. A resolution was unanimously carried requesting a grant from the Development Fund particularly to enable the club to carry out a Twelve Months' Laying Competition and a Utility Poultry Show.

Mr. G. A. Palmer reported on the result of the Conference of the poultry societies on the subject of Poultry-Keeping and the Preservation of Foxes and their meetings with the committee of the Masters of Fox Hounds' Association.

A general discussion followed, in which several members put forward suggestions as to improvements in the conditions of the laying competitions; varying views were given as to the advisability of breeding from heavy layers. The fox-hunting question was also discussed.

A vote of thanks to the British Dairy Farmers' Association for the use of the room and to the chairman for presiding brought the meeting to a close.

The forms for the register of breeds and advertisements for the new Year-Book are now issued, and members joining before the end of the month will have their entries included.

L. W. H. LAMAISON,

Merstham, Surrey.

Hon. Secretary.

## THE WHITE WYANDOTTE CLUB.

MINUTES of the committee meeting held at the Dairy Show, 1910. Present: Mr. G. Richards (chair) and Messrs. Goode and Elkington, and the hon. secretary, Mr. J. S. Hicks. Minutes of the last committee meeting were read, confirmed, and signed. The Club Show classification was gone into, and it was decided to strike out the £1 Selling Class and leave the remainder as before. The President's gold medal was allotted to the best novice bird in the four novice classes. The hon. secretary was instructed to proceed with the elections. Specials were granted to two shows and refused in one case. It was decided that in future the club's specials must be won by members or those who consent to join on winning. Miss Murray and Mr. C. Johnson were elected new members.

J. S. HICKS, Hon. Secretary.

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**Will our Readers and Advertisers kindly note that on  
and after December 2nd, 1910, our address will be  
TUDOR HOUSE, TUDOR STREET, E.C.**

